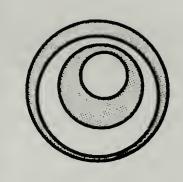
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THE CAMBRIDGE CHARTER SCHOOL



IN ASSOCIATION WITH THE INTERNATIONAL SCHOOL OF AMERICA

CHARTER SCHOOL APPLICATION COMMONWEALTH OF MASSACHUSETTS FEBRUARY 15, 1995

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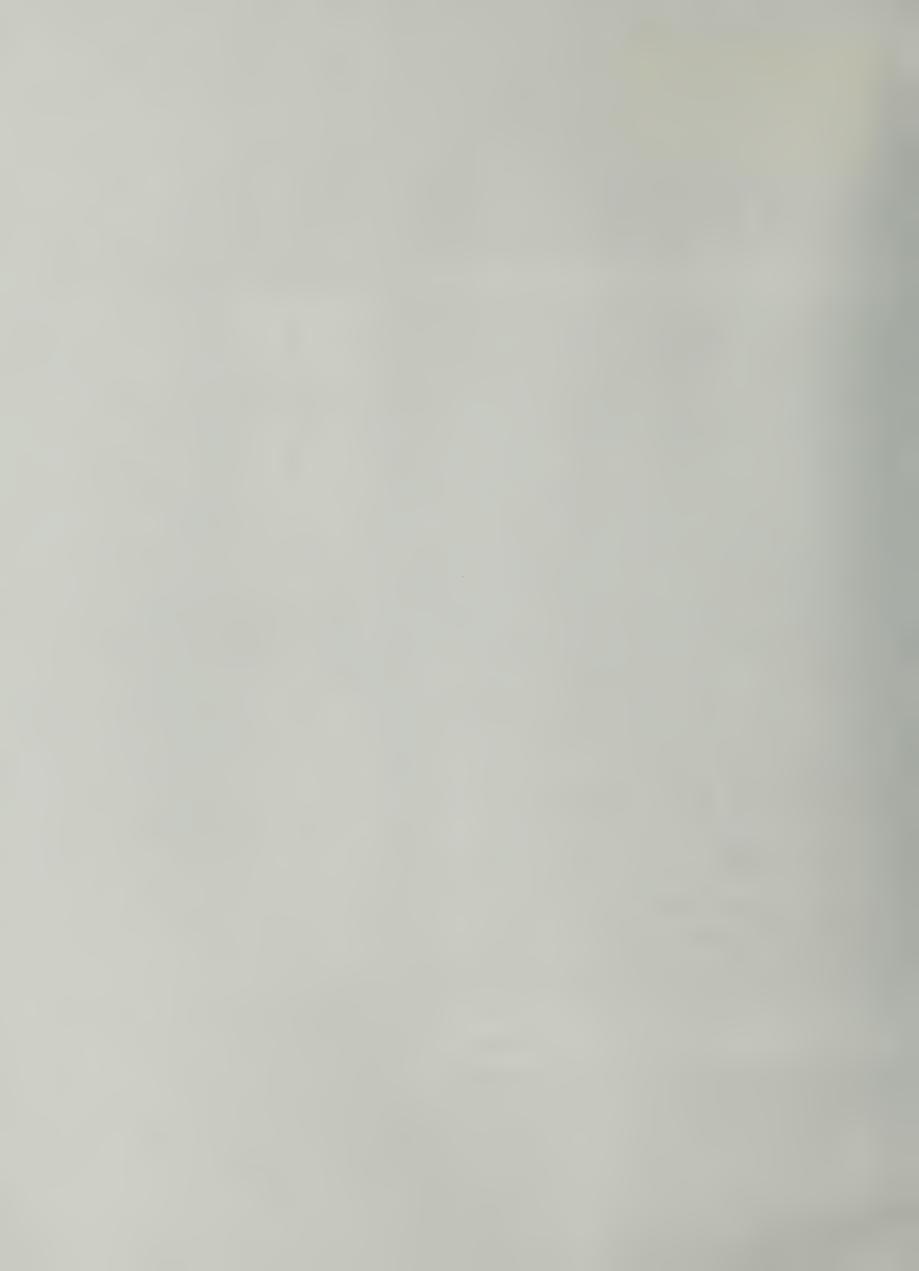
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OF EDUCATION

Submitted by:
Karl Jaeger, Project Founder
Josephine Burr, Project Coordinator

Jennifer Goldman, Project Coordinator

International School of America 19 Braddock Park Boston, Massachusetts 02116 tel: (617) 267-0026 Cambridge Charter School Project 375 Salem Street Medford, Massachusetts 02155 tel/fax: (617) 396-4005

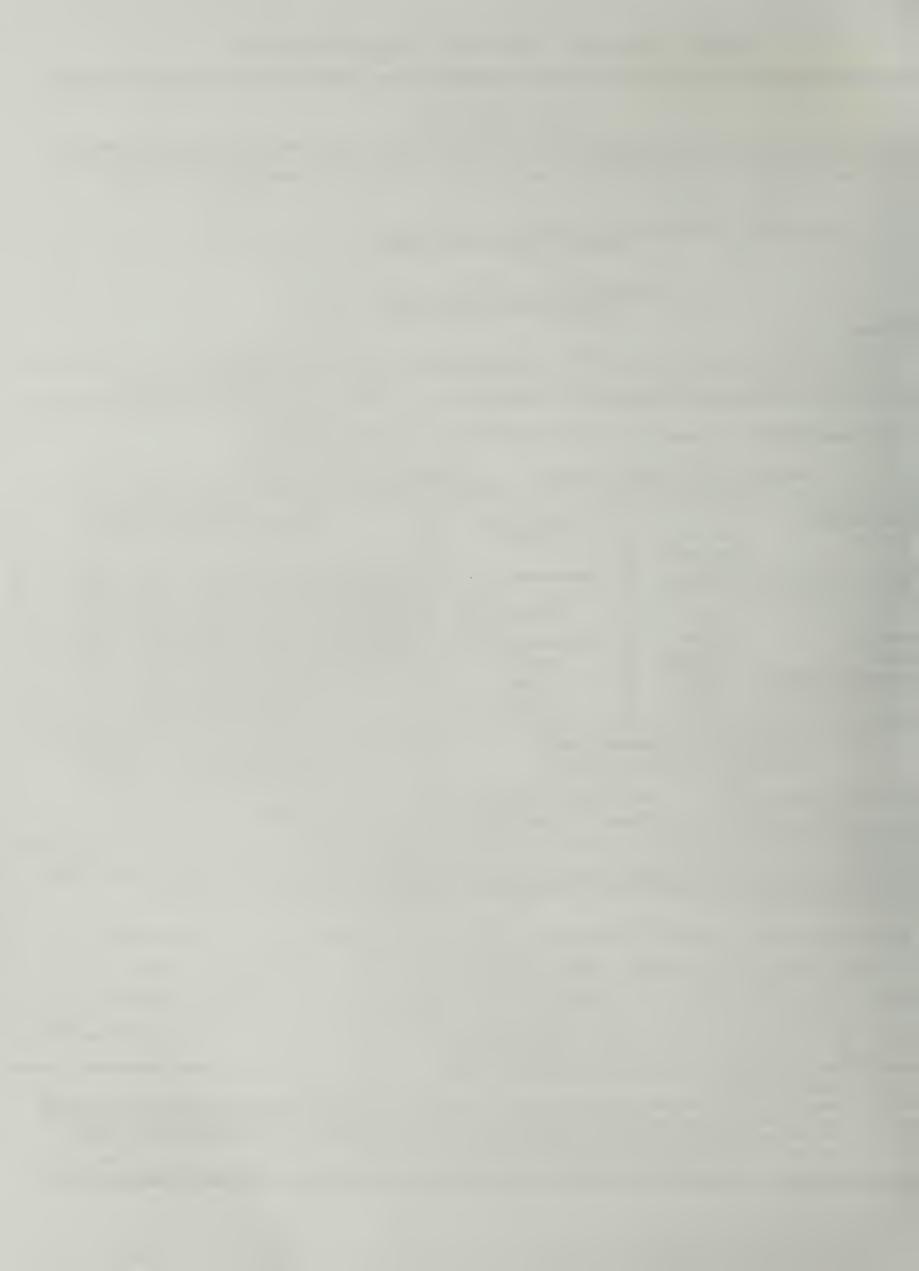


1995 Charter School Application

Basic Fact Sheet

This basic Fact Sheet will be used by the Executive Office of Education to conduct quick analysis of the applications received. The information furnished below must be accurate, and must correspond to that which is provided in the body of the proposal. This information will serve to provide reviewers at the Executive Office of Education with a snapshot of your proposal.

The Cambridge	ge Charter School	Nama	
	who dae MA. School-Location (city/to		
Contact Person First Karl	Middle Gebhard	Last Joeger	
Organization The International School of America Address 19 Braddock Park			
City Boston	, State <u>MA</u>	Zip 02166	
Telephone (617) 267-0026 Fax (617) 262-9299			
Founding Coalition: (Check Box) For-Profit Parents Teachers Business Community Based Organization Museum In what type of community the Charter School bearing to the Charter School		Projected Student Enrollment (1st Year) Projected Student Enrollment (2nd Year) Projected Student Enrollment (3rd Year) Projected Student Enrollment (3rd Year) Projected Student Enrollment (4th Year) Projected Student Enrollment (5th Year) Projected Student Enrollment (5th Year) Total Number of Teachers Teacher/Student Ratio Do you presently have access to a facility suitable for a school? Yes No	
School Focus: In succinct terms, describe the focus and primary characteristics of your proposed school and/or students to be served, (i.e., math & science, arts, school-based services, at-risk youth, college preparatory, basic skills, interdisciplinary learning, and competency-based learning).			
The International School of America offers its Charter School Students a new educational system, The Jay System. The system utilizes technology to allow all students the apportunity to design their individual Curriculum and to progress at their rate. All Massachusetts schools can easily replicate our model.			
Executive Summary (one page): To help the Executive Office of Education accurately portray your charter school proposal to the public, please attach a one page description of your school. This description should outline, in clear terms, the educational model to be employed; the replicability of that model; student demographics; and other characteristics setting this school apart from other traditional public schools. Above all, this summary should capture the vision of the founders.			



INTERNATIONAL HONORS PROGRAM in cooperation with BARD COLLEGE

19 Braddock Park Boston MA 02116 (617) 267-0026 (617) 262-9299 fax

15.2.95.

Executive Director. International School of America Karl Jaeger

Secretary Robertson Executive Office of Education One Ashburton Place

Director, International Honors Program Joan Thacher Tillany

Boston, Ma 02108.

Assistant to the Lydia Walshin

Dear Secretary Robertson,

Board of Directors Edward Goldsmith Devid Harrison Gebhard Keny William Michaelcheck

Karl Jacger, Chairman Crocker Snow

Advisory Committee Philip Applemen Indiana University Mario Bick **Bard College** Leon Botstein Bard College Edward Bruner University of Illinois Claude Buss Stanford University Anne Emerson Harvard University Robert Gardner Harvard University Nathan Glaser

Harvard University Barbara Kirshenblatt-Gimble New York University Brian Goodwin

The Open University David Griffiths

Herbert Passin Columbia University David Plath

University of Illinois Huston Smith Pacific Theological School

Herewith is our application for a Charter to create and operate a new High School in Cambridge. We believe that it will fulfil your desire for a "new" model that may be replicated far and wide.

From my experience in founding the International School of America I know that launching a new school, especially one which "breaks the mould" through educational innovation, is no small task. I assure you that I shall make sure of it's success to the best of my ability. Education has suffered for many years through lack of better models.

Cambridge is a wonderful site for our Jay System model. We have received just the support that we had hoped for at this early stage. We hope that you may give us the opportunity to make it all happen.

Best Wishes.

University of North Carolin Karl Jaege

Executive Director

International School of America

Alwani Advisors William L. Burke Daniel Frierson Stephen Gemble Christina Hoit Kristin Seeman Charles Stevenson Mary Wohlford

European Office 7 Lansdown Crescent Bath BA1 SEX England Tel. 011-44-225-317024 Fax 011-44-225-334964



TABLE OF CONTENTS

Mission Statement
School Objectives5
Statement of Need7
Profile of Founding Coalition10
School Demographics12
Recruiting & Marketing Plan15
Admissions Policy 10
Timetable
Evidence of Support2
Educational Program2
Student Performance27
Accountability29
Human Resource Information32
School Governance36
School Community39
Replicability and District Relations41
Building Options43
Code of Conduct44
Special Needs and Bilingual Students44
Funding45
Transportation46

- Appendixes:
 1. Budgets
 2. Letters of Support
 3. A Hypothetical Day in the Life of a Student at the Cambridge Charter School



CAMBRIDGE CHARTER SCHOOL

in association with the International School of America

CHARTER APPLICATION February 15, 1995

- 1. Mission Statement
- A. In succinct terms, describe the core philosophy or underlying purpose of the proposed school.

The Cambridge Charter School's mission is to rebuild a public school system which accommodates the needs, strengths and interests of each individual student in the school; to cultivate a learning environment in which students are given both freedom and responsibility in and for their educational choices; and to root the learning process in a dynamic context which is relevant to our students' lives. We have designed our school around a philosophy which aims to elevate the student, free the teacher, and propel the school as a whole into a more interactive and constructive role within the community and the world.

We envision a school in which the <u>student and the student's life</u> are the driving force behind what is learned, how it is learned, and the direction in which the individual chooses to take his/her education. We see the teacher as a facilitator in the student's self-realization, rather than as the sole deliverer of knowledge and discipline. We imagine the school itself unbound from the schoolhouse walls, and the community and the world at large becoming the "classroom" for our students.

The primary goal of this system is to prepare the student to use his mind resourcefully, to learn how to learn from and teach himself and others: not merely within an isolated classroom environment, but in a way which connects the student directly to the world outside the school, and which empowers the student to achieve in that larger world. In order to serve this goal, we believe that the current, largely unquestioned structures and roles which prevent the student from realizing her own individual potential must be thrown out. In their place we propose a new system which places both the responsibility for and the personal reward from learning on the student herself, and rewards and enriches the concept of achievement as a result.



To this end, the Cambridge Charter School is based upon the following key elements:

- Treating its students first and foremost as individuals, each with his/her own learning styles, strengths and weaknesses. The schedule and curriculum are structured to allow each student to proceed at his own pace, to be evaluated without stigmatization or comparison to other students, and to shape his own educational program in so far as reasonably possible.
- Shifting the learning process from the largely passive experience it is in the current system to an active, student-initiated and student-driven process. For a student learning actively, what is learned becomes a part of who she is. The role of the teacher has shifted from "deliverer of knowledge" to facilitator of a dynamic, individualized learning process.
- Expanding students' opportunities for interaction and joint work with others students, teachers, and other individuals in the community in order to develop meaningful skills in cooperation, creativity and human dynamics in problem-solving.
- Connecting the student, through both structure and curriculum, to the cultural,
 physical and intellectual resources of the community and the world at large, and
 accessing the student as directly as possible to the world's vast storehouse of
 knowledge.
- Developing a dynamic curriculum which can be easily modified, updated and replicated, and indeed will be constantly evolving with student and teacher input.

How will the Cambridge Charter School put this vision into action?

Our school is based upon an innovative program called the <u>Jay System</u>, which uses technology and hands-on experiential projects to bring the student back into the learning process. The Jay System begins with the philosophy that the student is essentially a <u>customer</u> of the educational system, the one who makes the educational choices, and the one who the school must be designed to serve. The following is a brief introduction to the system, which will be explained in further detail in Question #10. We encourage you to skip to that question before reviewing the rest of the application, for the proposal is of limited meaning without a specific consideration of the program we are introducing.

The Jay System replaces the traditional classroom with a curriculum based on two elements. The first element is a series of cumulative units of knowledge taught by means of interactive technology, called **Units of Achievement**. The Units of Achievement are designed to give the student <u>direct access</u> to information, rather than channeling it through the teacher. The second element consists of longer-term, hands-on exercises in creativity



and problem-solving, called **Lab Projects**. Each element constitutes approximately half of a student's educational program.

The aim of the <u>Units of Achievement</u> is to create a curriculum which allows students to work at their own pace, setting and achieving academic goals over a cumulative four-year period, and one which allows students to shape their own educational program by letting them choose which units they want to complete, how, and when. The Units of Achievement curriculum will take full advantage of the growing sources of intellectual power available in multi-media technology. The multi-dimensional, interactive capacities of modern educational technology will allow us to replace one-dimensional textbooks, chalkboards, and lectures with more effective, active learning tools. Students will work independently or in small groups on their Units of Achievement, and are tested for mastery when the individual student feels ready, and tutored, when necessary, by teachers.

Lab Projects are designed to harness the resources of the Cambridge community to provide unique opportunities for student inquiries. The Lab Project embodies our belief that the school and community cannot be divided, and that "real-life" involvement is a far more interesting and rewarding way for students to learn. Projects may be initiated and supervised by teachers, students, or academics or professionals from the Cambridge community; they may involve either individual or group work within and/or outside the school.

Our school will have, in addition to the central site, a number of satellite sites in cooperation with local universities and organizations such as WGBH, Harvard University, MIT and the Computer Museum. Here students can pursue group or individual lab projects in a non-traditional setting, and access a whole new set of intellectual and physical resources within their community. We will also maximize the use of technology to access information and provide additional media for our Projects.

The time for this kind of innovation in technology and curriculum is long overdue. Ours is a world of different boundaries, of vastly different possibilities for its citizens, than it was 100 years ago when the public school system evolved; and we see our charter as embracing the essence of charter schools in exploring these possibilities for the "citizens" of the public school.

B. As a charter school, your school will be a "laboratory of innovation" in the State's larger education reform effort. With this in mind, what impact do you hope your charter school will have on the state of public education in Massachusetts?

We imagine the impact of our school on the total public education system in Massachusetts to be potentially enormous, in terms of both the replicability of the system and the long-term improvements in the quality of education which the system has to offer. We have



considered this question in light of the overall goals of public education as well as the practical considerations of cost, accessibility and teacher/student incentive.

Replicability

One of the most important elements of the Cambridge Charter School's vision is that the System not only is an effective learning institution in and of itself, but easily accessible to <u>all</u> students, and easily replicated in other schools. We believe that the ability to replicate and network both the structure and curriculum of the school is one of our greatest strengths.

We imagine that the first few years of our school, as it is with any new program, will be a long-term process of fine-tuning the most effective and enriching curriculum for our students, with input from students, teachers, parents, members of our advisory committee(s), and local citizens. Once the curriculum and the technological programming are fully in place, the system may be easily transferred to other schools and continually expanded within each school. (Please see Question #16 for details)

Resources

Perhaps more significantly, our system encourages an <u>ongoing</u> exchange of resources and information between school and school, between school and community, and between school and home. A system like ours has the potential to vastly expand the educational resources available to students in every school, at a minimal cost to the school. Local resources and issues, as well, can be shared and understood in other communities through collaborative lab projects. We see our system as institutionalizing and expanding upon a trend in education already being explored by educational groups like TERC, which has established an on-line Global Lab project involving schools from all over the world. Projects like these not only raise students' awareness of themselves as active, contributing members of society, but often (as in the case of Global Lab) raises the <u>community's</u> awareness of and investment in the potential of its youth, a mutual respect which is sorely lacking today.

Revival

Our school also directly addresses the future of teaching in public education, an issue of great concern in today's schools. Teaching in a school where the curriculum is predetermined, where the students are restless and dissatisfied, where there is little or no room for individual attention and assistance, is an exhausting and thankless job. Our system aims to rejuvenate the teacher's role, by allowing him to work effectively with students and respond to their individual needs, rather than lecturing repetitively at them. The Jay System frees the teacher to do her own research and contribute actively to the curriculum, rather than passing on prescribed material and information. We imagine the impact of this redefinition to be a new, rejuvenated corps of teachers who are excited by and connected to their work.



One technique we plan to explore as a means of teacher motivation is to establish a profit sharing system. Teachers who develop Units of Achievement and Lab Projects will receive a percentage of revenue generated by licensing the Jay System in replicated form to other schools.

We also hope to rekindle an interest in the students themselves, in their own education and the education of others. By empowering and involving the student rather than alienating him, by encouraging him to teach others as a part of his own learning; by introducing into his education more effective role models and "real-life" mentors, we hope to inspire each student to stay involved in education as teachers and mentors him/herself.

Our overall goals for the school extend to an overall vision for public education not only in Massachusetts, but nationally as well. We hope our impact will be all-encompassing, not just on the schools but on their communities and the world at large. A school built on active, involved learning for the student and the teacher, and one built on the potential of the future rather than the icons of the past is, we believe, a school of great possibility.

2. School Objectives

A. What are the school's broad academic objectives for student learning?

The fundamental premise of our approach to education is that students must be <u>empowered</u> to make a difference, as both a student and a citizen of the world, and that intellectual and personal empowerment are part of an integrated mission for the school. Thus, the entire program of our school is built on the crucial underlying goal of providing students with the tools for self-knowledge and <u>meaningful</u> achievement, within the school and beyond it.

1. One of our prime academic goals is to help each individual "learn how to learn." We are aware that we are by no means alone in emphasizing this objective, but we believe that the fundamental nature of our system achieves this, for the Jay System says essentially to the student: "Look, nothing happens unless you make it happen, but if you do try, see how much you can achieve!"

In our system, nothing happens until the student decides to act. There is nothing which forces a student to pursue Units of Achievement. There is nothing to say that the student must sign up for a Lab Project. But when the student enters into the system actively because he wants to learn, then our student quickly discovers that his energy is accommodated with access to a vast repertoire of resources and opportunities that appeal to him and allow him to invest in his intellectual and manual talents. And finally, he has overall guidance and caring from his advisors. The system is designed around him and not the teacher - and above all, not around someone else's standards for how he should achieve.



- 2. Another broad academic goal of our program is to expose our students <u>directly</u> to a larger world than the one allowed by the confines of the school building. This goal is a direct extension of the educational success of the International School of America. We believe that learning can only begin in the classroom, that the world outside the school is a far more effective and exciting "classroom" for our students. The Cambridge community in particular offers vast resources for students to tap into, given an effective framework for exchange. Indeed, information and communications technology has made it possible for students to access an entire international community from the school, and to explore their role in it.
- 3. Finally, and equally important, we aim to help our students to discover themselves, their community, and their place in that larger but shrinking world. Our curriculum objectives, detailed in Question #10, further outline this concept as it will apply to our school. Briefly stated, we believe that exploring oneself and one's place culturally, historically, ecologically is a crucial part of developing a sense of identity and empowerment in any individual.

With these objectives in mind, we will establish a specific agenda of academic achievements required for matriculation from the Cambridge Charter School, each of which is a measure of our overall mission for the school. During their tenure at the Cambridge Charter School, we expect our students to:

- •Develop technological literacy and skills; demonstrate proficiency in the use of computer systems and familiarity with on-line systems.
- •Express, substantiate and defend ideas and opinions through creative and expository writing.
- •Read and analyze a specified number of works from a number of cultures, in both a literary and historical context.
- •Achieve proficiency in a second language relevant to the community in which they live, in order to be more effective communicators in the community.
- •Publicly defend an idea they believe in to the City Council, School Committee, Advisory Committee, Board of Trustees or another public forum.
- •Develop an awareness of both mind and body fitness.
- •Develop mathematical problem-solving skills in traditional and non-traditional subject areas, and apply these skills to tasks in the home and community.



- •Understand the dynamics of ecological systems in a scientific and societal context, and the relationship of humans to their physical environment; explore and appreciate the students immediate physical and natural environment.
- •Cultivate an aesthetic and historical appreciation of fine arts, music, dramatic arts and technical arts, and an active awareness of their own creative potential.
- •Develop an appreciation and articulation of their own cultural history; examine and discuss current events in a historical context.

B. Describe any non-academic goals for student performance.

The non-academic goals of the Cambridge Charter School are inextricably linked to our academic goals; we believe strongly that intellectual and character development are equal parts of one integrated process. Through our program, we aim to develop in our students:

- •Confidence in their ability to set and achieve goals, both in and out of the school environment.
- •Ability to work cooperatively with others toward a common goal.
- •Ability to listen openly and respond objectively to varying viewpoints.
- •Understanding and practice of conflict resolution skills.
- •Ability and confidence to imagine and effect change.
- •Empowerment to take responsibility for their future and the future of the world.
- •Appreciation of family diversity, customs and rituals within their own community.
- •Self esteem and pride in their accomplishments.
- 3. Statement of Need
- A. Why is there a need for this type of school?
- B. Explain why the charter school model would be an appropriate vehicle to address this need.

At a number of levels, students are not being served by the existing public education program. At the Cambridge Rindge and Latin School, last year the number of students who failed one or more course exceeded 1/3 of the total student population. Students are required to complete specific courses each year to graduate; nevertheless, if they do not, they are kept with their class and expected to keep up with more advanced coursework in



the following year. 68 students dropped out of school altogether, a low percentage compared to state averages and yet an alarming number in and of itself.

The number of students classified as "special needs" schoolwide constituted 22.3% of the total student population, nearly a quarter of the school. Nearly a quarter of the school will need "special," high-expenditure instruction and curriculum, in a stigmatized program, when a substantial number of those students are not learning disabled but simply have needs and styles which are not accommodated by the school's "normal" program.

From Teacher-Dependent to Student-Driven

These kinds of statistics are virtually universal to public schools across the nation. We believe that statistics like these belie basic flaws in the methodology and structure of the schools themselves, not the capacities of our students. Our current school system is fundamentally structured to underserve the student, through a **teacher-dependent system** which is simply not equipped to accommodate the students' individual needs.

Within the classroom, the teacher faces a fundamental dilemma. The educational ideal is that each student shall develop his or her talents and knowledge to each individual student's fullest potential. But how can one teacher, however talented and devoted, provide for the needs of, say, 30 different individuals simultaneously? The situation is virtually impossible. In a classroom with 30 individual students and one teacher, one source of authority and knowledge, the only way for teaching to occur is for students to sit quietly and attentively for long periods of time, and for the teacher to decide alone what and how the students will learn. The system becomes focused on how the <u>teacher</u> can do his/her job, rather than on how the <u>students</u> can do theirs, namely to learn.

In a classroom learning situation, then, students become teacher-dependent: they have little choice about what to study, how to study it and when, and little involvement in the learning process. Students are demobilized, pacified, and then expected to perform along a prescribed, standardized path. Furthermore, there is little incentive to expand or update either the teacher's body of knowledge or her teaching tools (e.g. textbooks); such efforts are often costly and inefficient. Thus the teacher is essentially a restrictive funnel standing between the student and the world's vast storehouse of knowledge, his knowledge and teaching style arbitrary to the student's interests and learning style.

The Jay System is designed to elevate the student into a proactive role in her own education, and to free the teacher to focus on the individual needs of each student. The self-paced Units of Achievement and Lab Projects allow each student to set and pursue her own goals, and to develop a direct and active connection to what she is learning. Students will receive close individual attention from teachers, advisors and project supervisors. The information and resources available to the student will be ever expanding, as updating Units of Achievement, creating new Lab Projects or expanding the school's resource network will no longer require a costly and cumbersome updating process.



Creating a Coherent Educational Program

Much of the inefficiency of the current public school system arises from the basic structure of the school itself, from the concept of the classroom to the arbitrary divisions of subjects and grades. Much of the current structure encourages the misconception that all students should be at the same level at the same time, by grouping students into large herds that move through the school day and the four-year curriculum at the same time, and by assessing them in comparison to one another through quantitative, standardized grading.

We believe that this is a fundamentally inefficient system, and one which creates as many problems as it purports to solve. Let us start with the student's course schedule. The division of the school day into isolated 50 minute segments, the school year into mandatory, arbitrary courses, and the four-year curriculum into a mass of disconnected information and experience, little of which is chosen by the student or relevant to his own life experience, fails to provide the student with a sense of progress, choice or relevance in his study.

Another example of inefficiency is in the grading system. An assessment system which merits each student according to the same prescribed standards of intelligence and achievement succeeds only in creating a competitive environment in which some students are rewarded for having one specific "kind" of intelligence, while others are demoted for possessing learning abilities which are not reflected in the school's standards of performance. Such a system creates unnecessary stigmas and prevents many students from excelling; and in many cases it can absolutely destroy a student's self esteem.

We propose to solve these problems by creating a coherent educational program which is driven by an individualized concept of progress and achievement. Firstly, we replace the segmented school year with a cumulative, interdisciplinary four-year curriculum which encourages student initiative and choice. Classes are replaced by student initiated programs; yearly grade levels are eliminated in favor of a more fluid, goal-oriented structure. In this way, we incorporate a sense of continuity and progress into the student's whole educational program, and allow each student to progress toward his goals at his own pace.

Secondly, we replace grades as a reflection of performance with cumulative individual achievement records (See Question #11). Students are tested on Units of Achievement on a pass/no-pass basis, and accumulate achievements which allow them to go on to new units. Evaluation and assessment on Units and Projects is individualized, rather than standardized, and designed to aid the student's learning rather than judge it. Students progress when they are ready, and when they have mastered material and ideas.

Bringing the Modern School into the Modern World



Education is fundamentally a communicative, interactive process. And yet, increasingly, the modern American public school system falls further and further short of incorporating either of these elements into the learning process. Over the past 100 years, revolutionary changes in industry, business, entertainment, travel and, most significantly, communications have transformed American society, created a global society, and profoundly altered the horizons of the most ordinary American citizen. The most basic principles and systems of business, government, and mass media have evolved with the emergence of communications technology. What has happened to the school?

It is increasingly crucial to educate our children in the context of the world in which we live. This is a central concept to the International School of America's programs, and we believe it is time to incorporate these ideas into public education. Bringing technology into the school accomplishes this in a number of ways. First, while allowing our students to work effectively, independently and at their own pace, technology has the potential to connect our students with a global community of minds and ideas, and to exchange information with students and "teachers" across the world. Second, incorporating technology into the school effectively at an early age allows students to develop absolutely necessary skills to succeed in an information-technology driven world. We hope to accomplish a similar goal through our Lab Projects, by allowing students to work first-hand with the tools they will use in future jobs (i.e. using real filming equipment and facilities to produce a student film, and receiving training from real filmmakers).

Additionally, as we discussed in our academic objectives, the school must focus on creating a sense of identity and place in our students, in the context of such a vast and increasingly complex world. No longer are our students (for the most part) members of the rural-agrarian society that gave birth to the so called modern school. We need to address this discrepancy and change the school accordingly. We believe our mission embraces this goal and addresses it effectively.

4. Profile of Founding Coalition:

A. Describe the make-up of the group or partnership that is working together to apply for a charter, including the names of the founders and their background and experiences.

The founding organization of the Cambridge Charter School is the International School of America, a non-profit educational foundation based in Boston and Bath, England. The ISA was founded in 1958 by Karl Jaeger, who has served as its Executive Director since then. Each year, the ISA runs the International Honors Program in cooperation with Bard College, a year-long course in global issues and one of the first accredited study abroad programs in the U.S. The IHP is unique in its blend of rigorous academic study and an emphasis on experiential learning; students range in age from 18 to 62, and are expected to



participate actively in all aspects of the program, from shaping the curriculum to making travel decisions. The itinerary of each program is global, involving comparative study of a current global issue in several contrasting societies.

Students carry a full course load each semester - five courses (32 undergraduate credits) taught by Program faculty. Performance is formally evaluated at the close of each semester, and, upon return to the United States, participants customarily receive academic credit from their own institutions. A transcript for work successfully completed is provided by Bard College. The International Honors Program is the first non-affiliated program ever to be accepted for credit at Harvard University.

Thirty students are selected to participate each year. The International Honors Program takes maximum advantage of its presence in each country visited. Students for the most part live with host families in the respective countries. The course work itself goes far beyond regular classroom meetings. Guest lecturers and field trips play a major role in the curriculum. Students have met with, among others, Jawaharlal Nehru, Mrs. Indira Gandhi, Malcolm X, Mrs. Eleanor Roosevelt, Willy Brandt, Margaret Mead, Ambassador Edwin O. Reischauer, Jane Goodall and Richard Leakey, Madame Chiang Kai-Shek, Max Lerner, Ivan Illich, James Lovelock, Lynn Margulis and Sunderlal Bahuguna, leader of India's Chipko movement.

Faculty and students work closely together throughout the year. Past faculty members, many of whom have sought out the IHP as an opportunity to work closely with students in the field, have included Gregory Bateson, Edgar Snow, Huston Smith, Daniel Lerner, Kazuo Kawai, Louis Nemser, Philip Appleman, David Plath, Claude Buss, George de Vos, Kushwant Singh, Lina Fruzzetti, Vlada Petric, Edward Bruner, Barbara Kirshenblatt Gimblett, Robert Gardner, Vandana Shiva, Brian Goodwin, Johann Galtung and Edward Goldsmith.

The International Honors Program is unique in terms of both its intellectual content and its challenge for motivation and self-discipline of its students. Participants come from diverse backgrounds and countries, and are from different universities and many areas of study. Our Charter School, while a distinct and separate program of the International School for America, will model itself in part after the unique educational successes of the IHP in terms of its emphasis on first-hand and interactive learning, cross-cultural exchange, and creating a sense of personal and group identity in a global context. We also plan to offer at least one scholarship to the IHP for graduating students each year.

The ISA's Executive Director and the principal founder of the Cambridge Charter School, Karl Jaeger, has worked in the field of education as a teacher, innovator and activist for over 35 years. He received degrees in education from Ohio State University and the Harvard Graduate School of Education, and taught high school English for a number of years in Columbus, Ohio. Mr. Jaeger personally led the International Honors Program for



seven years as a faculty member teaching Sociology. In Bath, England, where he currently resides, Mr. Jaeger has been an active supporter of cultural and educational institutions. He is currently a Trustee of the Bath College of Higher Education and the Bath Postal Museum, Founder and Director of the Brillig Art Center, Chairman of the Bath Environment Campaign, and re-founder of the Bath Royal Literary and Scientific Institute.

- B. Discuss how the group came together, as well as any partnership arrangements with existing schools, educational programs, businesses, non-profits, or any other entities or groups.
- C. Include any plans for further recruitment of founders or organizers of the school.

The International School of America is currently discussing a partnership with WGBH of Boston in developing the Cambridge Charter School. We have also secured commitments in curriculum and technology development assistance from a number of established local organizations and businesses, including Learningsmith Inc. (Cambridge), the Computer Museum of Boston, HMFH Architects and Educational Facility Planners (Cambridge) and the Technical Education Research Center of Cambridge (TERC), with collaboration pending at the Educational Development Center, local museums and other groups.

We are actively recruiting local educators, parents, and other members of the Cambridge community to join our development and technology committees and participate in ongoing structural and curricular planning. In addition, we are well into the process of establishing liaisons at the Harvard School of Education, MIT and other local universities, as well as Cambridge libraries and the Rindge and Latin School, in order to create a permanent network of resources for all schools involved.

- 5. School Demographics
- A. Describe the area where the school will be located.
- B. Why was this location selected? Are there other locations suitable to the needs and focus of the school?

The City of Cambridge, though not unique to surrounding communities in its strong commitment to equity education, can readily provide the educational and technological resources not available to most school systems.

We chose Cambridge for the following reasons:

• Harvard Graduate School of Education, MIT Media Lab and Lesley College School of Education can provide innovative pedogogies and curriculum development to the teachers and administrators at the Cambridge Charter School.



- With our focus on technology in the curriculum, the resources of WGBH and Learningsmith (staff, the WGBH archives, relationships with most, if not all, educational software and curriculum developers, media expertise, fundraising experience, teacher technology training Institutes, in-house test marketing of resources) will enable us to open the school in the fall of 1995.
- Easy accessibility by public transportation to any location in Cambridge, which will enable students to use many sites throughout the city for lab projects.
- The diversity among Cambridge students will allow this model to be easily replicated in other urban locations throughout the state.
- There is only one public high school in Cambridge (CRLS) that is expected to serve the individual needs of over 2200 students. Parents have no alternatives in Cambridge.
 - The City of Cambridge provides each student with \$9000/year for education.
- Many students in Cambridge are in desperate need of role models by virtue of being from single parent homes or homes with two working parents. Most students do not have the opportunity to interact with members of the community who are in a position to influence their career or higher education choices. In the Jay System, the Lab Project supervisors will be professionals, parents and educators who will join the school community on a part time basis and will certainly have a positive influence on the student.

C. Describe any unique demographic characteristics of the student population.

The Cambridge Charter School will embrace and explore differences in race, culture and soci-economic backgrounds and will treat each student as an individual with unique strengths and needs. Our outreach efforts will include community organizations that can help us reach populations that will benefit from the Jay System: students that have had difficulty achieving educational excellence in the current system, including students whose native language is not English, students with special needs, and minority students. The student population in Cambridge is comprised of the following demographic characteristics and reflects the need for a more individualized approach to both initial recruitment and to teaching in the school.

• The proportional enrollment of students whose home language is not English is 31.0%. The Cambridge Charter School intends to offer a Transitional Bilingual Program for students, offering core Units of Achievement in the native language.



Additionally, the Units of Achievement lend themselves to translation into other languages and will be an excellent means of achieving language skills.

- The proportion of all students who failed one or more courses is 33.1% and Blacks and Hispanics failed at higher than school wide rates. Again this clearly demonstrates the need for a change in the current system and curriculum. It is unacceptable, if students are taught in such a way that they will retain information and take responsibility for their own education, for one in three students in any population of the community to fail any courses. With the Jay System, students will no longer be put into a passive learning mode that exists because teachers must deal with such a large number of students simultaneously. Students will not fail courses, in the traditional sense, because material will be studied until the student feels ready for a comprehension test. If comprehension is below the high standard expected by the school, teachers will tutor students on specific Units of Achievement.
- During 1993-94, 68 or 3.4% of the population of students, dropped out of CRLS. We intend to lower this number significantly at the Cambridge Charter School. The Jay System gives students a sense of pride in their accomplishments. The current grading system lends itself to competition rather than cooperation between students. Oftentimes in the current system, students move passively through the system, completing classes but retaining little or no information, and when they attempt to apply the knowledge in an advance class, they become frustrated and feel useless. They can't compete with their more advanced peers but are forced to comprehend the same amount of information at the same pace. This leads to the high drop out rates in the schools.

D. What are the school's enrollment projections for the first five years?

For the first five years, we project the following enrollment figures:

1995	120 students
1996	180 students
1997	180 students
1998	180 students
1999	180 students

E. What grade levels will be served?

Although the Cambridge Charter School will not have traditional grade groupings, our students will be comprised of high school-aged students (grade 9-12 equivalent) who will not pass from grade to grade, but rather will accumulate a portfolio of Units of Achievement and Lab Projects.



- 6. Recruitment and Marketing Plan
- A. Demonstrate how you will publicize the school to attract a diverse pool of applicants.
- B. What type of outreach will be made to potential students and their families?
- C. Describe efforts to recruit students without parents to advocate on their behalf.

We anticipate that our initial efforts to gain visibility and credibility in the Cambridge community will be phased out as the school takes on a life of its own. We believe that the best way to elicit interest and participation from the local community is to demonstrate ourselves to be a unique and outstanding school, and let word of mouth and public opinion serve as the most powerful form of publicity.

However, such expectations demand that we initiate our first few years with a student body and faculty who are well-informed about and devoted to the principles of the school, and representative of the diverse Cambridge population. Thus we plan to initiate an extensive outreach and education plan in a number of different focal areas. During the coming weeks we will be recruiting our interim development staff, which will include one individual (a Cambridge resident) to oversee the outreach and recruitment process.

Visibility

Firstly, we hope to generate widespread publicity through articles in local papers as well as regional and national publications. We have spoken with the editors of both the Cambridge Tab and the Cambridge Chronicle about a post-charter feature on the school, and are discussing the possibility of a feature article in the Christian Science Monitor. We would also like to solicit publicity through Cambridge Community Television and other local broadcast media. We will print a number of posters and brochures and distribute them in schools, libraries, community centers and door-to-door. We plan to make this literature available in the five main languages taught in the Cambridge bilingual program (Spanish, Portuguese, Chinese, Korean and Creole), so as to inform as wide a circle of citizens as possible.

Community Network

Secondly, we are already in the process of establishing a network of liaisons in schools, churches, youth groups and community organizations to help us build a network of support and participation in the Cambridge Charter School initiative. We plan to arrange and publicize information sessions at many of the major community centers and forums, hosted by local parents and educators, to encourage input into the planning process and answer questions about the school. We are also planning to solicit assistance from these centers in establishing liaisons in Cambridge's ethnic communities and institutions, both for publicity and for our community resource network.

Among the organizations with whom we have initiated communication are the Cambridge Community Center, the Cambridge Alliance, the Cambridge Forum/Center for Civic



Networking, the Cambridge Boys and Girls Club, and the Cambridge Family YMCA, with whom we are also discussing a facility sharing plan. We plan to target youth guidance programs such as the Community Learning Center and the Cambridge Youth Guidance Center; extracurricular and continuing education providers such as the Cambridge Adult Education Center, the Cambridge Co-operative (with whom we are discussing a lunch program contract) and the Cambridge Multicultural Arts Center; parent's organizations such as the Cambridge Parents' Collaborative and the Parents' Information Center; churches; and public and private after-school programs.

We will develop connections in public and private school guidance offices and teachers' associations in order to develop effective communication and exchange between our school and existing schools. We are discussing with the Rindge and Latin school the possibility of establishing a recommendation program, whereby CRLS can refer students to us and participate in our admissions process.

Finally, as an important part of our outreach to parents and community members, we will be contacting Cambridge businesses and universities. We will hold open houses and distribute information in these workplaces as a way to contact parents, potential project supervisors, and potential funders for our school.

Students Without Parents

Our efforts to contact students without parents and youth outside of the school system will be encompassed in part by our outreach to youth guidance and employment centers, but will also include ongoing communication with the Department of Youth Services and the Department of Social Services, and with their associated programs in the Cambridge area. We will also work through youth and community employment offices, to reach youth who have chosen work over full-time school, and help them develop a way to integrate these needs through our program.

Ultimately, our goal is to create not only visibility but credibility in the community as well. We are aiming to build not only a solid student body for our first years as a charter school, but also a citywide network of invested, informed and active participants in the development of our school. We recognize this goal as an integral part of our overall vision as a school, and as the most crucial element of our healthy development at this time.

- 7. Admissions Policy
- A. Describe the admissions methods and standards you will use to select students.
- B. Describe the process and timetable to be used for admitting students, including a plan for the admissions lottery.
- C. Explain how these policies further the mission of the school in a nondiscriminatory fashion



In accordance with the guidelines for all Charter Schools, the Cambridge Charter School's admissions policy is non-discriminatory and complies with the admissions requirements set forth in M.G.L. c.71 s.89. In adhering to the mission of the school to create an atmosphere which will embrace and explore differences in race, culture and socioeconomic backgrounds, the Cambridge Charter School student body will represent a cross section of the community with respect to the above characteristics.

Candidates will be interviewed by a committee comprised of teachers, parents and administrators who will seek out applicants who show the initiative and intellectual curiosity to learn, but have not necessarily shown a strong academic record in the past. Because our curriculum is self-paced and technology-enhanced, our admissions committee will give particular attention to students who can be best served by the schools focus, including students with special needs. Our Units of Achievement and, in particular, our system of individual tutoring and advising will enable students of varying abilities to maintain a clear sense of progress and achievement and to be motivated to continue in the learning process. A percentage of the school population will be drawn from specific students identified by the administration at CRLS who could benefit from our technology-enhanced curriculum.

The following steps will be taken to ensure that the student's needs are compatible with the mission of the Jay System:

- •Written materials, in all appropriate languages, will be provided to the parents/guardians upon request. The materials will outline the mission of the Jay System, a profile of the Founders, and the educational program, including a listing of Units of Achievement and some of the Lab Projects available in year one.
- •Students will complete an Application Form, due before June 15. In addition, applicants must submit three letters of recommendation from past teachers, school administrators, employers, or adult authority figures.
- •Prospective students and their parent(s) or guardian will meet with the Director of the school to discuss the Jay System and how the system could best serve the individual student. Students and parents/guardians will describe what they seek in an educational environment and what goals they hope to achieve at the school.
- •Parents will provide a profile of any special attention needed by the student. The Director of the school will discuss how the school structure can provide the necessary support.
- •Accepted students will receive notification by mail.



- •Accepted students and their parents/guardians will be invited to attend an open house to meet teachers, administrators, and community supporters.
- •In the event that there is an excess of qualified candidates for the 120 spots at the Cambridge Charter School, an admissions lottery will be held. Preference will be given to applicants living in Cambridge as well as those who have siblings already attending the school.



8. Provide a detailed timetable of projected steps and dates leading to the opening of a charter school.

The following is a timetable based on a projected opening in September of 1995:

February 1995: Application due 2/15

Recruit development staff from Cambridge community

Continue site development

Finalize technology and development committees

Continue community outreach: meetings, articles, letters (ongoing)

March: Charter granted 3/15

Hire development staff (4 1/2-time individuals)

Formalize development advisory committees; first meetings

Solidify sponsorship, (fundraising ongoing)

Commit to school site

Begin student recruitment plan (ongoing)

Begin teacher, staff recruitment plan; continue director search (ongoing)

Continue community outreach

April First liaison meeting with Cambridge school department, Cambridge

Rindge and Latin School

Finalize initial Board of Trustees; first meeting

Establish school by-laws, hiring policy, initial budget, school seal;

establish hiring committee for Director

May Establish main satellite sites and supervisors/liaisons (recruitment ongoing)

Solicit bids for sub-contract work - lunch program, custodial services,

technology maintenance services, etc.

Begin any necessary renovations to primary school site

Second Board of Trustees meeting

Select school director(s), establish curriculum policies, review budget,

establish contract policies and guidelines

June Acquisition, installation of instructional materials - computer hardware,

software (June-August)

Preparation of facilities (June-August)

Bulk of student recruitment completed

Third Board of Trustees meeting

Review curriculum development; review facility preparation; establish

student Code of Conduct; appoint initial Advisory Board



July Complete teacher/staff recruitment

Finalize insurance policies

Fourth Board of Trustees meeting

Review curriculum development, complete personnel policies, finalize

insurance policies, finalize contracts and facility plans

August Complete student recruitment

Staff/faculty training, orientation (full-time)

Fifth Board of Trustees meeting

Final review and approval of curriculum, visit school site, finalize and

approve Goals and Standards for first year of operation.

September School opens

Public funding initiated

Post-opening: Continue Cambridge school liaison meetings

Continue development of community resource network

Begin planning for Annual Meeting

Continue curriculum development for 10-11 grade level and above



- 9. Evidence of Support
- A. Try to convey as clearly as possible the scope of community backing for the proposed charter school.
- B. In tangible terms, such as a survey or letters of support, demonstrate this community support among teachers, parents, students, community leaders and others.

The support for the Cambridge Charter School has been tremendous and reflects the need and demand for a student driven system of education in Massachusetts. Not only have we generated enthusiasm for our system in Cambridge, but we have had the opportunity to meet educators and technology experts from throughout the state and the nation and they too have expressed a strong interest and curiosity in our system.

The letters of support we have submitted with the application demonstrate the level and scope of support in the community. These educators, software and curriculum developers, and parents have all made a commitment to our mission and will serve as members of our Development and Technology Committees, advising us on issues relating to funding, community outreach, pedogogies, site development and curriculum.

Letters of support are included in Appendix 1, attached.

- 10. Educational Program
- A. Describe the educational program of the school, providing a detailed overview of curriculum objectives and content in the main subject areas.
- B. What teaching methods will be used? How will this pedagogy enhance student learning?

I. Curriculum Objectives

The Cambridge Charter School's primary goal is to prepare the student to use his/her mind resourcefully and to give the student primary responsibility for learning. With the aim of empowering the student, however, lies the inherent responsibility of providing the student with the tools for self-knowledge. Particularly in an age overwhelmed by globalism and information exchange, developing in our students a sense of identity and place in the world is an increasingly crucial challenge for the Cambridge Charter School.

Thus, while covering traditional subject areas, our curriculum will be structured to help our students discover and understand themselves and their place through their study. Our coursework will focus on discovering the cultural history, politics, ecology, literature, etc. of the local region, and the heritage of the students themselves. We will incorporate field work and experiential learning wherever possible.



With this in mind, we plan to incorporate the following themes into our curriculum, all based on exploring the idea of human and personal "place":

Place in History/Future: Our approach to learning and history is to help the student realize how history has affected him and his "place" in the world. We will study history in the context of current events and consider its destiny in our future. This will include the study of Literature, Art, Religion, Philosophy, Politics, Economics and World History.

Place in the Biosphere: This dimension will examine the student's place as a member of a complex local and global ecosystem. We will study the Earth as an integrated system and examine the impact of human activity on the environment. This will encompass the study of Geology, Economics, Biology, Political Science, Ecology, Social Anthropology, Philosophy and Psychology.

Place in Scale: Here we begin with our student in the center of a vast scale - a speck on a planet in the solar system that is a galaxy among millions of galaxies. We also begin with ourselves and plunge, not into space but inward, into our bodies and their spaces down to DNA itself. In this context we will study Math, Astronomy, Physics, Biology and Chemistry.

By necessity, we are not able to provide a detailed outline of our curriculum for this application. We are in the middle stages of establishing a committee of experts on educational pedagogy, curriculum development and educational technology, to develop a full curricular framework for our school. We have approached several local and national educational research groups who have done significant work in incorporating technology into public school curricula, about a collaborative project, with funding from a third source. Additionally, we also feel that the curriculum will - and should - be significantly enriched by the students attending the school, and hope to allow flexibility in our planning for this reason.

We do plan to offer a curriculum which spans from a remedial level for entering students who have not reached the established ninth grade level, to a college level for students who advance quickly through our system. We will strive to develop fundamental skills in our students, such as reading comprehension, writing skills and basic math, with equal emphasis to our encouragement of innovative programming.

II. Educational Program

Our educational program, the Jay System, is designed to maximize student resources, student choice, and student initiative. The shift in our educational system from the traditional school system is in some ways analagous to the shift from cottage industry to factories which took place during the Industrial Revolution. The classrooms in our current education system are in many ways equivalent to cottage industries: They are relatively



small, relatively isolated, and relatively static, and as a result they produced at a relatively low and inefficient rate. In order for real change to occur, cottage workers were transported to factories which were designed to utilize new sources of power and produce far more efficiently. The Jay System is designed to utilize new sources of intellectual power, as manifested in multi-media technology. Our entire educational program is structured to take advantage of the resources now available to our students in a way which the traditional infrastructure simply cannot accomodate, because it was not designed to do so.

In order to accomplish this most effectively, the Jay System <u>abandons</u> the traditional classroom model. As we have emphasized throughout this application, we believe that the teacher-dominated classroom creates passivity and poor standards, dulls creativity and intellectual curiosity, and ignores the individual needs of the student. In place of the classroom, we envision a mixed community of students and teachers working at individual workstations, multi-media stations equipped with CD-Rom capacity which are available to each student throughout the day. In place of the traditional curriculum we offer a student-initiated and teacher-facilitated curriculum based on <u>Units of Achievement</u> and <u>Lab Projects</u>, each of which constitutes about half of a student's educational program.

Units of Achievement

Units of Achievement are "packets of information" which are packaged in whatever form - video, audio, written material, CD-Rom, or a combination of multiple media - is appropriate for that Unit. Students check out Units of Achievement from a central resource area and pursues them independently or in small groups at their work station. The Units are structured cumulatively, so that the completion of one unit unlocks further units, allowing each student to move through the curriculum at his own pace.

When the student has studied the Unit to his satisfaction and feels ready to be tested, he arranges for the appropriate test at the school's <u>Test Center</u>, where all tests are individually administered, graded and the results recorded and stored. The tests are administered on a pass/no-pass basis, in a manner similar to a driver's license test. If a test is not passed, the student may reschedule it several days later. This will give the student a chance to review the material and/or ask a teacher for tutorial help on an individual basis if necessary. By eliminating letter or numerical grades for these tests, we are avoiding stigmatizing students and discouraging comparison and competition among students. This method recognizes what is sometimes referred to as "mastery learning;" i.e. demonstrating true mastery of the material. (Test assessment is explained further in Question #11, Student Performance). Note also the fundamental difference in teacher-student interaction: our student decides for himself when he is ready to be tested, and is provided with individual help when he needs and requests it. This dynamic is an essential element of our approach to education.



The Test Center will have the technology to record and store all of the <u>levels of achievement</u> which the student has passed since entering the school, and the equipment to print out, for each assessment period, a list of each student's most recent levels of achievement, including a brief description of the subject matter of the units for the benefit of the parents. Progress reports will be printed for each student every six weeks, and will be reviewed with the student's personal advisor, as detailed below. Naturally, within any given assessment period some students will have passed more levels than others, but <u>all</u> students will have a list of achievements to show for their work.

Units of Achievement have a number of important advantages to the student - most importantly that they give the student <u>choice</u> and <u>responsibility</u> for his approach in choosing his Units of Achievement, learning the material and preparing for the test. He may review the Unit as often as he wants or needs to. He may work with other students on a Unit or a series of Units, and discuss the material together (although each student is tested individually). If a student misses school he is not "left behind" as he was in the old classroom system - the Units of Achievement await his return.

Most importantly - and this, we believe, addresses one of the major flaws of the classroom system - each student can work at his own pace. In most traditional school systems, students are expected to progress alongside each other within the narrow constraints of what the school has determined to be the appropriate curriculum and syllabus for their "grade". As a result, students are often "held back" or "left behind" by the coursework demanded of them. Students who stray from the norm are categorized "gifted" or "slow learners", and systematically isolated from their peers. With the Jay System, each student is encouraged to set and pursue his own goals, and rewarded for his achievements rather than judged in comparison to his peers. A student can move forward quickly, if he feels capable of doing so. Additionally, if a student is "into" a particular subject such as American History, he can pursue a series of Units on the subject with minimal interruption, and even develop a Lab Project to explore the subject more deeply.

Lab Projects

The second part of our curriculum, the <u>Lab Projects</u>, constitute a very different and complementary approach to learning. Lab Projects, which make up about half of a student's schedule, are longer-term, hands-on exercises in problem-solving, initiative and creativity. The Project system is designed to encourage students to take advantage of resources outside the school to help them pursue inquiries and gain real-life experience in fields and subjects which interest them. We will focus much of our energy in the coming months on developing a wide network of professional, intellectual and physical resources from outside the school for our Lab Projects. Here we imagine networking physically, through <u>satellite sites</u>, as well as electronically and otherwise. We have already established



a number of tentative sites for our students, including facilities at WGBH, Harvard University, Learningsmith and other local organizations.

Lab Projects can be anything from producing a play, to launching a school paper, to finding out why ice floats - and often a Lab Project can be a further exploration or application of ideas presented in a Unit of Achievement. Projects will be divided into three general categories: Individual Projects, Group Projects and Ongoing Projects.

Individual Projects are pursued by a student independently, generally at his own inspiration but occasionally at the suggestion of a teacher, advisor or other person. Individual Projects (e.g. painting a picture, writing a short story, volunteering at a local organization, or doing independent research) are arranged between the student and his personal advisor. The student develops a proposal including project goals, duration, and logistical concerns, and the advisor helps him arrange details and monitors his progress throughout. Each Individual Project will also require a project supervisor, either from within or outside the school, who can advise and monitor the student in the specific subject area of his project. All advisors and supervisors complete an evaluation of the student when the project ends, which goes into his portfolio along with a self-evaluation and any physical documentation of project work.

Group Projects, on the other hand, will be proposed and "advertised" via a designated bulletin board. The proposer may be a teacher or a student, or someone from outside the immediate school community. The school will invite professionals and skilled individuals or even organizations, to supervise these projects - in this way we hope to expose our students to architects, journalists, activists, cabinet makers and other potential teachers and role models in the greater Cambridge community. We also see this approach as a way to expose the community to the character and potential of its youth, and to create an ongoing intergenerational exchange.

Proposed Group Projects are posted on a bulletin board in a student common area; interested students will attend a meeting to explore the possibility. If the project seems viable and has the sustained support of a teacher and students, then the project becomes "official" and an appropriate physical space within or outside the school building is assigned, and a timetable is established. Since we have eliminated the rigid period structure of the old school, there is sufficient flexibility in the system to fit a number of lab projects into each student's program at one time.

In addition, we envision a number of <u>ongoing projects</u> to enrich the school community, such as a school paper which students will periodically petition to join and leave. A significant "project" in this category, which we have developed in accordance with our



curriculum objectives, will be a program of voluntary <u>family exchanges</u> for students and their families. Given Cambridge's diverse ethnic population, with over 30 nationalities currently residing in the city, we see a valuable experience for our students in arranging one- to three-week homestay exchanges for students within the school. The International School of America, with 35 years of experience arranging international homestays, is well-experienced in organizing family exchanges and aware of their profound educational value.

We also hope to establish a system for students to produce Units of Achievement to enrich the curriculum. Indeed, such projects could be an invaluable way for students to have input into the school program, and to learn by teaching others.

We include as an appendix a "Hypothetical Day in the Life of a Student at the Cambridge Charter School" which outlines three examples of the potential of Lab Projects. The possibilities are as diverse and imaginative as our teachers, students and guest project supervisors can make them. Here also, our links with Cambridge's rich intellectual and cultural community will be of major importance to the school.

III. The Role of the Teacher

Note that we have significantly changed the role of the teacher, although not his ultimate objective, which is to help the student acquire an excellent and deep-rooted education. Indeed, we feel that the Jay System frees the teacher to pursue the work which for the majority of teachers is the most rewarding. Traditionally, in the classroom structure, the teacher will lead five classes in a seven-period day's schedule. In the first class, he's just getting warmed up; in the second class he's hitting his stride; in the third he's at his peak; by the fourth he's getting stale and by the last he's hoarse. We are no longer putting the teacher in this thankless role of meeting 150 students a day to try to perform mass transfers of information which can often be more effectively understood through individualized programs. Instead the teacher can focus on understanding and assisting individual students with specific problems, helping students develop innovative projects, and developing and leading Lab Projects and Units of Achievement themselves.

Each student will have a personal school advisor, a teacher who is responsible for being aware of the student's overall school work. Each teacher will be assigned approximately 10 students, familiarizing themselves with the personalities, strengths and needs of each individual student. Besides being an assistant in learning, the teacher exists in this system to help the student identify and pursue educational goals, and to monitor the student's progress and the areas in which s/he needs work. Aside from meeting at least weekly with each student/advisee, teachers/advisors meet with students at the beginning and end of each semester to establish (and then evaluate) long-term goals for achievement during the term.



The advisor will also be responsible for preparing written evaluations of the student's work for his/her portfolio.

Ideally, a student has the same advisor throughout his/her time at the school, so as to create a meaningful and fruitful relationship between the two. The teacher will also have the opportunity to develop a relationship with the student's parent(s) or guardian(s), and will meet regularly with the parents to discuss their child's performance and progress.

C. Describe the school calendar and hours of operation of the school.

We will maintain the same calendar and hours of operation as the Cambridge Rindge and Latin School. We will make every effort within our budget to maximize afternoon and weekend monitoring, so that students may use the school's resources on a flexible schedule.

- 11. Student Performance:
- A. Describe your proposed plan to assess student performance.
- B. What remediation will be available for underperforming students?
- C. How will student development towards the school's stated learning objectives be measured?

The goal of student assessment at the Cambridge Charter School will be threefold:

- •first, to determine how the student is progressing toward the academic and non-academic objectives stated above;
- •second, to allow students and teachers to identify the student's personal strengths and achievements, as well as the areas where he needs work, and set goals accordingly;
- •third, to provide a quantifiable record of achievement for colleges and jobs after graduation.

Underlying these goals is a firm belief that student assessment should be structured to **help** the student to learn, not to judge or stigmatize a student's performance on a standardized scale. We encourage the development of personal strengths, and thus structure our assessment program to look at a student's performance holistically, rather than according to a limited definition of intelligence and achievement.

Thus, our assessment program is based on a combination of what has become known as "portfolio" assessment - documentation and evaluation of performance in specific projects, accumulated during the student's entire tenure - and cumulative achievement testing, which documents on a pass/no-pass basis the unit achievement levels which the student has passed. In order to graduate, a student must complete (satisfactorily) a minimum number of units in each designated subject area and a minimum number of individual and group lab projects, but each student will be expected to set her own goals for each semester, with



the guidance of her advisor(s). In this way, we will establish a personally challenging and rigorous program for each student, but allow the <u>student</u> to set the pace and thus develop a sense of responsibility for his educational progress.

Lab Project Assessment

Portfolios for lab projects will consist of any physical documentation of the project (i.e. a paper or series of papers, a piece of art or music, a videotape or film) along with written evaluations by the student's advisor and supervisor(s) for the project. In some cases there may also be a peer evaluation, if a great deal of cooperative work has been done in a small group. Evaluations will be designed not only to review academic performance, but to monitor the student's progress toward non-academic goals as well, i.e. group skills, problem-solving, the ability to listen and respond openly to others. A student's portfolio is reviewed by a mixed group at the end of each semester, and assessment is made on the basis of:

- attendance and participation;
- engagement and application to the tasks and goals of each project;
- interdisciplinary academic achievement;
- resourcefulness/creativity in achieving goals; and
- group/leadership skills (where applicable).

Units of Achievement Assessment

Student performance on Units of Achievement is assessed through individual testing on a pass/no pass basis. The goal of this kind of assessment is that a student's record will reflect his passed units, or achievements, on a cumulative basis, with the student setting the pace. We are aiming through this system to eliminate the stigmatization of grading, whereby students are judged in comparison to one another on their performance on a prescribed, timed learning plan.

As outlined in question #10, the units of achievement are structured to build upon each other, so that each passed unit "unlocks" other units, a cumulative system which approaches the curriculum as a four-year continuous process, rather than breaking up the educational program into arbitrary, isolated segments. Since each unit is essentially an extension of previous units in that set, testing for each unit reinforces a student's comprehension of units already passed. Testing on units is a measure of comprehension of the material; although deeper analysis of issues and facts is also emphasized. Tests will be assessed according to:

- •Reading/media comprehension;
- •Ability to make connections between issues and facts presented in the Unit(s); and
- •Ability to apply concepts to understand and solve "real-life" problems.

All testing records will be kept on database, and a progress report on levels of achievement will be printed for the students and their parents every six weeks.



Finally, students are assessed on a semesterly basis by their advisors and themselves, on their performance in setting and achieving both short term and long term goals. This will include a review of the term's work, a re-evaluation of the goals set by the students, and a discussion of strategies for the next semester's work.

There will be no grades or quantitative assessment in the Jay System, although we plan to devise an equivalency system which will provide comprehensive transcripts for students transferring or applying to colleges or jobs.

Remediation

We strongly believe that our educational model puts the very idea of "remedial" education into question. Remediation is based on the false assumption that all students should be at a specific level of learning by a specific age or time; our program rejects that assumption in favor of an individual-based approach which allows students to work at their own pace. Teachers will be available for individual tutoring on specific subjects, particularly for help in units which a student is having trouble passing. Similarly, a student may work on a unit in a small group; students are encouraged to act as tutors to one another in every aspect of the program.

We feel that our program may serve special needs students better than the isolating programs in most public high schools, by setting them alongside <u>but not in comparison to</u> students at all different achievement levels. We believe that many so-called "special needs" students are not slow learners, but possess different learning abilities that are underserved and stigmatized by the current system, and may flourish in an individualized program such as ours. In the case of students with serious physiological or psychological limitations, we will assign a special advisor(s) qualified to work with students with disabilities, and, when necessary, special units of achievement.

12. Accountability

A. What methods of self-assessment or evaluation will be used?

B. How will teachers and administrators be evaluated?

Our self-assessment and teacher/administrator assessment plans will be carried out on both a formal and an informal basis. While we recognize and accommodate the need for regular internal review and refinement of our program, we also feel that a school based on choice will internally weed out the less successful programs and clarify the more successful ones.

Teacher Assessment

Because the Cambridge Charter School has been designed to serve the individual needs of the student, measurement of teacher success is directly tied to student academic achievement and must be considered first and foremost when evaluating the school as a whole. Our formal evaluation process is as follows:



- Teachers and Administrators will be evaluated semesterly by the Board of Trustees in an informal discussion of their methods of tutoring and mentoring as well as the progress of their individual advisees. At this time, teachers will be expected to articulate perceived reasons for a students lack of motivation in given subject areas and to address the ways in which the teacher can better serve and motivate the student. Staff performance will be assessed based on student evaluations, student/advisee performance, relationship to parents, and overall contribution to the school's program and mission. The Board of Trustees will submit a more formal written evaluation which will remain in the teacher's file and will be available to the parents, upon request.
- Teachers and Administrators will be evaluated quarterly by their student advisees. The students will be given an evaluation form to fill in (written by the teachers and approved by the Board of Trustees) which will address questions such as "Does the teacher explain clearly and thoroughly" and "Does the teacher treat me like an individual and address my unique strengths, weaknesses academic goals and needs?"

Informally, teacher performance will be reviewed on a daily basis by student response, peer relationships, and parent communication. Since the academic program is based on choice, students' interest in to projects and tutorials led by specific teachers will be an indicator of success as well. If few students sign up for a teacher's Project, this will directly reflect the teacher's talent and reputation.

School Assessment

There are several formal ways that the Cambridge Charter School will measure and evaluate progress of the school's policies and curriculum. The Board of Trustees will set yearly standards and goals for the school's performance, by which progress during the year will be measured. A report of the "Standards and Goals Set Forth by the Cambridge Charter School" will be available to the general public. Progress will also be measured by gathering and assessing several benchmark statistics:

- The attendance rate for both students and teachers will be measured and compared to standards set in the Cambridge Public School System. Drop out rates will also be compared to the city and national standards.
- The performance and reputation of the Cambridge Charter School can be quantified by the number of students who apply to the school for year two and by the number of applications received by teachers and administrators from other public and private schools.
- Performance on National Standardized Tests and the district-wide assessment program will be compared to the national and district averages.



• The number of Units of Achievement passed by the total student population in a given period compared to previous periods is an excellent indicator of the System's success.

Informally, as with teacher assessment, the presence of choice for all students attending and considering attending the Cambridge Charter School will serve as an effective measure of success as well. Indeed, our primary benchmark in self-assessment is whether or not students continue to attend and apply to the school; as a charter school, our success depends upon response.

C. How do you plan to hold your school accountable to the public and parents?

Because input from parents and the community is crucial to the success of our school and we appreciate that many parents are on schedules that do not always prove flexible, we will do our best to communicate and seek input in several ways.

- Parents and other community members will be invited to participate as supervisors of lab projects for individuals or groups of students. Parents or other community members can also submit ideas for lab projects on the bulletin board at the school.
 Parents are always encouraged to visit the off-site labs with their sons/daughters for a day and actually participate in the lab.
- Quarterly reports will be generated by the Testing Center and will contain the Units of Achievement that have been passed by the student and a description of the Unit content. These reports will be given to parents and the Board of Trustees. Parents will be invited to semesterly meetings with the student's individual advisor to discuss progress, although additional meetings may be initiated at any time.
- Our school will have an open-door policy; open houses will not be restricted to a two-hour period of time during the evening hours. Parents and the community will be encouraged to drop by and observe whenever their schedule permits. (As long as it does not interfere with the school's primary goal) Because teachers are free from the classroom they will be available to meet with parents without appointment.
- As an ongoing lab project, students and teachers will put together a monthly newsletter that will highlight special achievements, describe new lab projects or the results of an ongoing project, interview members of the community who "make a difference" in the school, discuss new technologies being incorporated into the school, have editorials on issues in the Cambridge community from the student's viewpoint and announce upcoming events parents will want to include on their schedules. We hope to enlist the involvement of local publishers and journalists in the project. The paper will be available to the general public.



- Annual open forums will take place at the school for parents, teachers, members of the Board of Trustees and the general public. The highlights of these meetings will be reported in community papers.
- Cambridge Liaison Meetings will take place quarterly with the Cambridge School Department and the teachers, administrators and parents of Cambridge Rindge and Latin School. The Cambridge Liaison will be established for all educators in Cambridge high schools to exchange ideas in order to better serve the students in the community. Teachers will share ideas on curriculum and new technologies and instructional materials will be shared by both schools. The School Department may wish to discuss new policies instituted in the city and the effects these new policies will have on the schools.
- The Board of Trustees will include at least two parent representatives and three community leader representatives with full voting power, and the Advisory Committee will include at least five parents and a number of community members who have shown involvement and dedication to the School.
- All Board of Trustees meetings and Advisory Committee meetings will be open to the public, unless special circumstances require otherwise.
- D. Discuss your plan for regular review of school budgets and financial records.
 E. Describe your plan for maintaining school records and disseminating information required under public school law.

School budgets and financial records will be maintained by the Cambridge Charter School Chief Financial Officer and monthly reports will be generated for the Board of Trustees. Under public school law as set forth in M.G.L. c.71, s.89, the Annual Report will be put together by the Board, and made available to the general public and to the parents and guardians of students and potential students by August 1 of each year for the preceding school year. The Annual Report will include all revenues and expenditures as well as assets, liabilities and fund balances. The Annual Report will also include financial projections for the following school year and will include information on the progress toward any goals set forth by the Cambridge Charter School.

13. Human Resource Information

A. Describe the standards to be used in the hiring process.

Because the role of the teacher is crucial to the success of any school, the Cambridge Charter School will use strict hiring standards, choosing teachers who believe in the mission of the school and the Jay System and show a strong desire to guide students in their educational journey. Our teachers must demonstrate the ability to motivate students from diverse backgrounds through positive, non-traditional teaching methods and to help



the student identify and pursue educational goals. We will actively recruit teachers and administrators who are diverse in terms of race, gender, religion, and language skills.

In March 1995, we will begin the process of hiring teachers for the opening of the school in September 1995. Detailed job descriptions will be developed for all positions in the school. Our first priority for recruitment are teachers currently employed at CRLS. We have met with the Vice Principal at CRLS to discuss the possibility of a one or two year rotation of teachers from CRLS. Teachers will be recommended by the administration at CRLS and approved by the Board of Trustees of the Cambridge Charter School. This program will be mutually beneficial as it will give the Charter School experienced teachers from the existing system that would bring with them insight into the unique demographics of Cambridge students and, upon returning to CRLS, these teachers will have the experience of the teaching methods of the Jay System. Our schools could also share ideas on curriculum and instructional materials would be accessible to all students. This Teacher Exchange Program will directly and immediately benefit the Cambridge Public School System.

Since we are not confined to hiring certified teachers, the Cambridge Charter School will conduct a search similar to the International School of America. We will utilize the expertise of people outside traditional academia and recruit practitioners, government officials and special guests. We will hire a recruitment officer as part of our interim staff who will be in charge of personnel outreach and hiring.

Applicants will submit a resume and three letters of reference directly to the Board of Trustees. The Board will review applications and interview candidates for the Director; once the Director is chosen s/he will oversee the selection process for the administrative staff and faculty, with final approval given by the Board. Final decisions will be made by July 15. The Cambridge Charter School will use the following standards for hiring **Teachers**:

- Candidates must demonstrate a commitment to our mission and to the Jay System.
- •Candidates must demonstrate a commitment to incorporating technology into the school.
- •Candidates must be media literate and have the skills and ability to contribute to the production of Units of Achievement.
- •Candidates must be sensitive to the current global, sociological and philosophical state and needs of young people facing the new millennium.
- •Candidates must demonstrate innovation and creativity in previous professional roles.
- •Candidates must have at least three years of full-time teaching experience; preference will be given to candidates who are certified under Massachusetts



Teaching Requirements. All selected candidates must attend mandatory professional development programs provided by the Cambridge Charter School.

- •Candidates must demonstrate knowledge of the unique needs of the Cambridge community, including issues of race, religion, culture and socio-economic differences.
- •Preference will be given to bilingual candidates, and in some cases mastery of a second language will be required.
- •Candidates must demonstrate a belief that all students can achieve.
- •Candidates must commit to teaching at potential Lab sites and show a willingness to collaborate with the Cambridge community.
- •Candidates must demonstrate a willingness to treat each student as an individual with unique strengths and weaknesses and to adjust his/her teaching methods accordingly.
- •Candidates must demonstrate a grasp of their area of expertise which is compatible with the academic objectives/philosophies of the school.
- One or two teachers from CRLS will be encouraged to apply for the 1995 year.

Applications for the position of Director will be reviewed and interviewed by the Board of Trustees. A final decision will be made by May 15. The Cambridge Charter School will use the following standards for hiring the **Director:**

- •Candidates must demonstrate a commitment to our mission and the Jay System and the ability to communicate this vision to the community.
 - •Candidates must demonstrate a commitment to incorporating technology into the school.
 - •Candidates must have held positions of leadership, and demonstrate excellent innovational, organizational and communications skills. .
 - •Candidates must demonstrate knowledge of technology-enhanced curriculum development for high school students. Special consideration will be given to applicants who possess an advanced degree in Educational Technology or a related field.
 - •Candidates must demonstrate the ability to oversee the Chief Financial Officer and all financial activities
 - •Candidates must demonstrate knowledge of the unique needs of the Cambridge community, including issues of race, religion and socio-economic differences.

B. What is the targeted staff size and teacher/student ratio?



The staff of the 1995 Cambridge Charter School will include the following:

- 1 full-time Director
- 8 full time Teachers
- 2 full-time (or equivalent) Guidance Counselors/Special Needs Aides
- 1 full time Administrator/Bursar
- 1 full time Administrative Assistant
- 2 full-time (or equivalent) Custodial Staff

Student-teacher ratio will be in the range of 10:1.

C. What professional development opportunities will be available?

All staff of the Cambridge Charter School will be required to attend an intensive two-week training on incorporating technology into the classroom. This is currently available at WGBH and The Computer Museum. We will arrange for this during the month of August, prior to the opening of school. Money has been allotted for each teacher in the budget for continuing professional development.

D. Describe the human resource policies: salaries, contracts, hiring and dismissal, benefit packages

Salaries for teachers and administrators will be competitive with salaries in the Cambridge Public School System. In accordance with M.G.L. c.71, s.89 charter school employees are subject to the same collective bargaining provisions of M.G.L. c.150E including the right to organize, negotiate and execute collective bargaining agreements with a public employer, the employer in this case being the Board of Trustees. All teachers are subject to the state retirement plan.

Contracts for teachers will be on an annual basis and will be subject to dismissal by the Director. The Director will be employed on an annual contract and will be subject to dismissal by the Board of Trustees.

Benefits will include Medical/Dental Insurance, disability and accident insurance, optional life insurance, paid vacation days, sick days and personal days.



14. School Governance:

A. Describe the internal form of management to be implemented at your school, including any plans to contract with an outside group to manage the school.

The community we hope to establish at the Cambridge Charter School will encourage formal and informal input from all members involved, including students, teachers, parents, administration, and other members of the Cambridge community. This will be a community in which every member will be expected to play a contributing role in the development and continuing integrity of the school, particularly the students. The mission of the Cambridge Charter School is individual empowerment and responsibility among its students. The role of the broader governing bodies, including the Board of Trustees and the administration, is to ensure that these standards and goals for the school community are achieved and maintained.

Our internal management structure will include:

An active, dedicated Board of Trustees, to consist of no more than 15 but no less than 5 members, all of whom have been chosen for their dedication to the school's ideals.

A dynamic, dedicated Director, responsible for overseeing the implementation of Board policies and overseeing the management of the school's educational program, including ensuring that the school's financial and administrative resources are sufficient to support the goals of the School. The Director is also responsible for making recommendations to the Board for Advisory Committee appointments

An Advisory Committee, comprised of at least two teachers, five parents, and two students (who will receive Lab Project credit for their participation), as well as a number of community members who have been involved and dedicated to the school.

B. How will the Board of Trustees be chosen?

The Board of Trustees will consist of no more than fifteen, and no less than five members. The initial Board will be established by April of 1995; the founders will interview and appoint prospective Board members. Following the first Annual Meeting of the School, to take place during the first school semester, new members of the Board of Trustees will be nominated and elected internally. At the first Annual Meeting nominations will be opened to the general public, at which time interested candidates must submit a brief statement of qualification to the Board, who will appoint candidates based on their experience and dedication to the school's mission. Some qualities we will seek in our Board of Trustee members include:

- •A long-standing relationship with the Cambridge community;
- •Experience and expertise in education;
- •Experience and expertise in technology, particularly educational technology;
- •Connections to the Cambridge educational system, as well as private and parochial schools;



- •Experience and expertise in fundraising and fiscal matters;
- •Connections to local institutions of higher learning, particularly schools of education;
- •Long-standing relationship with and understanding of Cambridge youth;
- Creativity and innovation;
- •Media and political connections and experience;
- •Demonstrated commitment to the ideals and goals of the Cambridge Charter School

The Board will include at least two parent representatives and three community leaders; we will strive to maintain a Board that reflects the diversity of the Cambridge community. Members will serve a two-year tenure on the Board, with option for re-election.

The Advisory Committee, as explained above, will be appointed by the Board of Trustees at the recommendation of the school's Director. Advisors will serve a one-year tenure, with option for re-appointment.

C. Describe the roles and responsibilities of the Board.

In accordance with 601 CMR 1.05, the Board of Trustees, in consultation with the Advisory Committee, will be responsible for approving the school's curriculum, developing a yearly budget and Annual Report of the school's fiscal activities, setting forth the school's Standards and Goals annually (in conjunction with the Advisory Committee), and establishing student, staff and administrative policies, including but not limited to personnel policies, student code of conduct, school sub-contracts, building policies and lease, and fiscal policies. The Board of Trustees will assume fiscal and legal responsibility for the School.

The Advisory Committee will be responsible for advising the Board of Trustees on matters of concern to the school, including curriculum development, budget issues, code of conduct and personnel policies. The Advisory Committee will also be responsible for providing opportunities for input and communication from all teachers, students, administrators, and families of the Charter School.

The Board and the Advisory Committee will meet, separately and at different times, once a month for the first year of the school, to ensure that sufficient time and energy is given to the establishment and refinement of school policies and decisions. The initial Board will begin meeting in April of 1995. The Board and Advisory Committee will decide at the end of the school year whether to continue monthly meetings, or to continue on a bi-monthly basis. In addition, Board and Advisory Committee members will be required to spend at least one full day during the school year visiting the school, and meeting with teachers, student groups, and administrators.

Unless specifically requested otherwise, the Director is expected to attend all Board meetings.



At least once per year, the Advisory Committee will meet with the Board of Trustees to establish standards and goals for the school for the upcoming year, and to evaluate the school's progress in achieving desired outcomes. In addition, the Committee and the Board will co-chair an Annual Meeting for all students, parents, teachers, administrators and concerned community members. The Board of Trustees will prepare for this meeting a presentation of the school's progress over the previous year, financially and otherwise, and a preliminary agenda for areas to focus on in the coming year. The Trustees will also note any seats opening on the Board, and open nominations to the general public. The meeting will be a major source of input from the school community as a whole.

In accordance with open meeting laws, all Advisory Committee and Board Meetings will be open to the public, and will be announced at least one week in advance to the school community.

D. Describe the relationship of the board to the teachers and administrators.

Our school mission mandates active contribution on all levels from all members of the school community, and the teachers in particular. The input of teachers is crucial to any decision to be made in the school, as teachers represent the meeting point of students, parents, the outside community and the administration. Teachers and administrators provide a key inside perspective on the operations of the school, and their well being as mediators of the school environment is of utmost importance. Thus every effort will be made to allow staff input into Board decisions. As mentioned earlier, the Board will appoint at least two teacher representatives and one administrative representative to the Advisory Committee. These representatives will be responsible for listening to, and communicating to the Committee, the viewpoints of the staff as a whole. Additionally, all staff is welcome to come and be heard at both Advisory Committee and Board of Trustees meetings.

The Director will also be responsible for representing administrative and staff concerns on the Board of Trustees, and will be expected to make him/herself available to staff for communication on issues which concern them.

E. Discuss the nature of parental and student involvement in decision-making matters.

There will be a number of established ways and a number of potential other ways for parents and students to participate in the governance of the school. The Board of Trustees will consist of at least two parents, and the Advisory Committee will have at least five parent representatives and two student representatives seated on the Committee. As with teacher and administrative representatives, the parent and student representatives will be responsible for maintaining open communication with their peers and fairly representing the views of the student and parent constituents as a whole. Representatives may establish student or parent councils to advise the Committee in a more formal fashion if they so choose.



Parent and student evaluations of the school, administered regularly, will also play a major role in directing Board decisions and activities. All evaluations will be kept on file and used as reference by the Board.

There will be an Annual Meeting for all parents, teachers, students, administrators and concerned community members, during which the agenda will be set for areas of focus for the next year. The Board of Trustees will present major decisions and milestones from the previous year, and will present a financial report on the school. This will be a significant time for parents and students to contribute actively to the governance decisions of the school.

15. School Community

A. What type of community environment do you hope to foster at your school?

The underlying purpose of the Cambridge Charter School, as described in question #1, is linked directly to the community environment we hope to foster. We will cultivate an environment conducive to learning and one in which individual strengths and styles are celebrated. The students are ultimately responsible for their educational choices. This promotes an environment of pride in their achievements and an awareness of the role they play in the process. No longer will the students be confined to the boundaries of the traditonal classroom; through the uses of technology, including a global network, students will have immediate access to the most current pool of knowledge.

In this type of environment where students are self-driven they are more inclined to share their learning experience with other students leading to a greater appreciation of and respect for each other's individual strengths.

B. Describe the nature and extent of parental involvement in the life of the school.

As described in detail in question 12C on accountability of the school to the parents, parents/guardians will be expected to play an active role in the education of the child on a daily basis. We will not repeat all of the options here, but will highlight them briefly. Please refer back to #12 for a detailed description.

- 1. Freeing teachers from the classroom will enable parents to meet with them more spontaneously and at the convenience of the parent.
- 2. Parents will be encouraged to call and informally discuss their children's progress on a regular basis.



- 3. Because the emphasis at the Cambridge Charter School is on the individual, parents are encouraged to share changes in family situations with the teachers so that the students can be better served by the Jay System. The system is designed to take into account these changes and the Units, Lab Projects and levels of mentoring can be adjusted accordingly.
- 3. Parents will meet with the student's advisor to discuss the progress of the student, as demonstrated on the report generated by the Testing Center.
- 4. Parents are always encouraged to visit the off-site labs with their sons/daughters for a day and actually participate in the lab.
- 5. Parents will receive the monthly newspaper.
- 6. Bi-monthly open forums will take place in Cambridge for parents, teachers, Board of Trustees and the general public.
- 7. Cambridge Liaison Meetings will take place quarterly with the Cambridge School Department and the teachers, administrators and parents of Cambridge Rindge and Latin School.

C. Describe the relationship of your school to the surrounding community.

From the outset, we have emphasized the role of the community in the Cambridge Charter School and continue to build ties with parents, grass roots organizations, corporations that have shown an interest in our mission through their own work, and educational institutions in and around Cambridge, including Cambridge Rindge and Latin. In our efforts to solicit the support of the community, we have found there to be an enormous amount of interest in the Jay System and in the use of technology in the classroom. In January, we cosponsored a conference with the World Times newspaper on Technology and Education and invited several members of the community to participate and since that time, these participants have made a commitment to the Charter School and will assist us in curriculum development and acquisition of needed technology and softwares as well as assisting us with additional community outreach. The conference was a worthwhile investment for us and as a result, the Jay System has taken on a life of its own and word of our efforts have spread through the community.

As described in question #6, we will continue our efforts once we have received the charter in March. We have had a positive response from the media and, upon receiving the Charter, will feature articles and news programs highlighting the school and its mission. We have developed a network of liaisons within the school community and will continue



monthly meetings to allow for open lines of communication between schools in the district. We have been invited to present our ideas on educational reform and the link between education and technology to community groups in Cambridge, and will continue to encourage input from these groups during the planning process. We have been assisted in the search for a site by a group of architects and zoning board members in Cambridge who believe in our vision for the youth of Cambridge. They have also opened the doors for us to several parent and community groups in the area. We will continue our relationship with the Archdiocese of Cambridge and will work with them to establish liaisons with the churches and family centers of Cambridge, in order to reach a diverse ethnic community.

We recognize the role that the community plays in the Charter School and will continue our outreach efforts to create not only visibility but also credibility within the community. Please see #9 for letters of support from members of the community.

16. Replicability and District Relations

A. How will your charter school offer replicable educational models to the schools in the surrounding districts?

One of the most important elements of the Cambridge Charter School's vision is that the system not only be an effective learning institution in and of itself, but that it be easily accessible to <u>all</u> students, and easily replicated in other schools. We believe that the ability to replicate and network both the structure and curriculum of the school is one of our greatest strengths as a system.

As explained in previous questions, our curriculum will be made up of Units of Achievement, cumulative "blocks" of knowledge that will be accessed through the use of multimedia technologies. These "blocks" can be easily updated, modified and replicated by the students and teachers; replication and modification will become an integral part of the learning process.

Once the Units of Achievement are designed, sufficiently tested by our students and meet the high educational standards set by our staff, the process of replication can begin. The true advantage of replicating the Jay System within other districts is the low start up costs associated with the system. Our technologies and systems information can be stored on CD ROM or disks for widespread distribution. This process of sharing resources can be accomplished with a minimum amount of required investment on the part of the recipient.



In addition to distributing information via CD ROM or disk, we can supply our curriculum to an on-line network allowing other schools easy access to the resources. It will also afford us the opportunity to work with world experts on electronic networking to develop an eductionnal web.

B. Provide any specific programs to be provided by the charter school which would directly benefit the district.

We see our system benefiting CRLS and other schools in the district immediately. As stated previously, as soon as the Units of Achievement are developed, they can be duplicated and shared with teachers and students at CRLS.

Students at one or more of the Houses at CRLS will have direct access to the Lab Projects (on a space available basis) offered to the students at the Cambridge Charter School. This will give all Cambridge public high school students access to additional intellectual and cultural resources and members of the Cambridge community.

Additionally, our desire to establish a system of teacher rotation with CRLS will directly impact the system. The teachers who work at the Cambridge Charter School for one or two years will bring new resources and knowledge of the Jay System back to the classroom at CRLS, hopefully instilling our mission of a learning environment which accommodates the individual needs, strengths and interests into the school.

C. What efforts have you made to build rapport with the district from which your charter school would draw students?

The founders of the Cambridge Charter School met at length with the Principal, Vice Principal and Co-Heads of the School of Technical Arts at CRLS and discussed the following possible collaborations:

- •The teacher exchange program as detailed in Part B. This would be mutually beneficial as it would provide the Cambridge Charter School with experienced teachers from the existing system.
- •We believe a student lottery, with input from the teachers and administrators at Rindge, would also be mutually beneficial. We want to attract students of varying learning styles to show the enormous potential for replicability of the Jay System; CRLS does not want us to "cream" the top layer of students from the school. The lottery will fulfill both requirements and give Rindge the opportunity to recommend students who could benefit from our technology-enhanced, self-paced curriculum.



•We will have monthly Liaison Meetings with members of the Cambridge School Department and CRLS. These meetings will ensure open lines of communication between the two schools. Parent and student representatives will be invited to participate in this meeting.

A number of people at CRLS are excited to have additional resources from which to draw and believe that students will benefit from the incorporation of multimedia technology into the curriculum.

17. Building Options:

- A. Describe your present options for a school building.
- B. Demonstrate how this site(s) would be a suitable facility for the proposed school, including any plans to renovate and bring facility to compliance with all applicable school building codes.
- C. Discuss any progress or future plans for acquisition of a school building.
- D. Describe financing plans, if any.

We have at this time several definite options for a central school site to accommodate our program and 120 students. We plan to have a primary site which will be technologically equipped for at least 70 workstations, a test center, several administrative and faculty offices, a number of conference/project spaces and a student lunch/socializing area. In addition, we are seeking facilities for performance and manual arts, athletics, and laboratory work.

We are in active discussion with a number of realtors, developers and educational facility planners in Cambridge, all of whom have been extremely helpful in aiding us to determine the ideal primary site for our school. Among the possibilities we are considering are:

A former church parish house in Central Square, with immediate proximity to the MBTA and the Central and Harvard Square areas, as well as the YMCA and the City Hall. We are discussing the possibility of a student access program to Y facilities and programs with the Director of the YMCA, and have approached the Cambridge Food Cooperative, located a block away, about the possibility of a lunch provision program.

A Diocese-owned school facility in North Cambridge, equipped to accomodate several hundred students, with cafeteria and athletic facilities as well as generous classroom and outdoor space. This facility is also located in near proximity to public transportation and neighborhood stores, recreation areas, etc.

Both of these spaces are in full accordance with Massachusetts Building Codes, and are fully handicap-accessible; both spaces are in good condition and would not need any major renovation work. We are also considering spaces in Porter Square and Harvard Square,



and are still looking for other options. We are also looking actively for collaborative "satellite sites", but will concentrate for the moment on establishing a central site first. Naturally, lessors are not willing to guarantee sites without assurance of a Charter being awarded.

18. Code of Conduct

A. Discuss any rules or guidelines governing student behavior.

The Cambridge Charter School expects students and the entire Charter School community to treat each other with respect and fairness. We encourage our students to interact verbally whenever appropriate, treating each other with consideration and respecting the opinion of others. Because many of our Lab Projects will take place at sites outside the school property, we expect the students, at all times, to reflect the high standards of behavior we demand at the school. We will not tolerate the following behavior from our students:

- •Conflict of a violent nature.
- •Disrespect for the personal property of any member of the school community.
- •The use of drugs, alcohol or weapons in any form.
- •Discriminatory behavior, including racial or sexual remarks deemed inappropriate.
- •Excessive absence or tardiness

Whenever possible and/or appropriate, we will solve our differences in a democratic fashion. We plan to establish a formal grievance and review procedure, with a student/teacher board.

B. Describe your school's policies regarding student expulsion and suspension.

The Director will have the authority to dismiss students he/she considers excessively and repeatedly disruptive to the school environment and mission. He/she will make decisions with the guidance of whatever grievance/judicial committee is established within the school.

The Board of Trustees will establish a full Code of Conduct with specific guidelines and procedures for warnings, in-school suspension, out-of-school suspension and expulsion.

19. Special Needs and Bilingual Students

A. Describe how your school will accommodate special needs students.

We believe that all students are capable of achievement and, given additional and individual mentoring from teachers and a recognition of individual learning styles, special needs students will realize their potential and reach the highest levels of educational excellence. The Cambridge Charter School and the Jay System is designed to serve the individual needs of all students, recognizing both strengths and weaknesses and building a curriculum around their specific needs.



How, specifically, will we accommodate the special needs students under the State's Special Education Law, Chapter 766?

- •The self-paced curriculum will give each student their own portfolio of achievements; they will all excel at their own pace
- •Students will not be labeled by grades or divisions
- •Lab Projects will allow interaction between all students of varying skill levels
- •Teachers will be freed from the classroom and will provide students with tutoring as frequently as is necessary to reach the standards set by the Cambridge Charter School

The members of the community who have shown support, including WGBH, The Computer Museum, Educational Development Center, TERC and the MIT Media Lab, all have been trained to serve the special needs community and we will utilize these resources in building our curriculum and establishing the Units of Achievement. We will also employ a part time special needs aide and a part time school social worker to address the special needs of these students.

B. Describe how your school will accommodate bilingual students.

The Cambridge Charter School will comply with State Regulations M.G.L. c. 71A and 603 C.M.R. 14 in its accommodation of bilingual students. Given the number of students in Cambridge who do not speak English as a first language in the home (31%) E.S.L. courses will be established to ensure the highest level of academic standards. Students will be matched with an advisor who speaks the native language of the advisee (Spanish, Portuguese, Chinese, Creole, Korean) and individual tutoring will take place as the student develops fluency in verbal and written English. Additionally, the Units of Achievement lend themselves to translation into other languages and will also be an excellent means of achieving language skills.

20. Funding

- A. Devise a start-up budget covering the planning and capital expenses before school opening.
- B. Do you plan to conduct any fund-raising efforts to generate capital or to supplement the per-pupil allocations? If so, explain.
- C. Using the attached template, devise a 5-year budget covering all projected sources of revenue, both public and private, and planned expenditures.
- B. Because there is no start-up funding provided by the State, we feel we must raise funding and support from private sources. The International School of America has invested a considerable amount of funding into the development process thus far, including sponsorship of a conference on education and technology organized by the World Paper. We plan to devote some of our own funds into the post-charter development, but



ultimately plan to build our budget largely on the per-pupil allocation of \$9000.00 per student granted with the charter.

We plan to apply for a line of credit once the charter is granted, so as to be able to incorporate some projected per-pupil allocations into our initial development efforts. In addition, we plan to apply for funding from several large foundations that support education, including the George I Alden Trust, the Davis Foundation, and the State Street Foundation. We will seek equipment sponsorship from a major software company, with the idea that they will provide us with the hardware and technological services to equip the school in exchange for association with an innovative educational initiative.

21. Transportation

A. Discuss plans for transporting students within the local district to and from school.

Because we intend to choose a site with close proximity to public transportation, many of our students, as well as the teachers, will use the MBTA as transportation. Students can receive MBTA cards and would be eligible for half-price fares. When public transportation is not readily available, the students residing in Cambridge will use the district transportation system as we fully expect to work cooperatively with the Cambridge School District and students in the district are eligible for the same transportation as the public school students.

The nature of the Jay System is such that additional travel to Lab sites in Cambridge will be required. Again, we will rely on the MBTA system for the majority of the transportation.

B. How will students be transported from outside the district?

Students attending from outside the district are eligible for transportation under M.G.L. c.76, s.12B, the school choice statute. Depending on the number of students who attend from outside the district, we will organize a carpool with the parents or the parents can transport the students to the Cambridge town line and then the students will be transported by the district buses.

Home school districts are required to transport resident special needs students, who are eligible under M.G.L. c.766, to charter schools outside the district.



Start Up Budget - Cambridge Charter School

TOTAL EXPENDITURES	\$184,500		
Facility Renovation	\$10,000		
Rent	\$72,000		
Misc. Furniture	\$ 5,000		
Copy/Phone/Fax	\$ 3,000		
Workstations	\$ 7,000		
Development Staff	\$40,000		
Fringe Benefits	\$ 9,500		
Admin. Asst.	\$ 4,200		
Teachers	\$23,300		
Principal	\$10,500		
Salaries			

^{*} Costs for start-up hardware, software and office equipment (copy machine, etc.) are included in Year 1 of the Projected Budget.



Charter School Operating Budget Five Year Projection

DESCRIPTION	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
REVENUES Pupil's	120	180	180	180	180
Per Pupil Tuition Revenue	1050,000	1,620,000	1,620,000	1,620,000	1620,000
Student Entitlements	, ,	, ,	, ,		
Grants	150,000	150,000	150,000	150,000	150,000
TOTAL REVENUES	1,230,000	,	1,770,000	•	•
EXPENSES					
Direct Student Costs:					
Transportation	•				
Supplies / chairs etc	7500	13,500	9000	9000	9000
Computers and Materials					
Field Study / Lab Projects	45,000	54,000	54,000	54,000	54000
Insurance Expense	27 000	33,000	35,000	37,600	39,000
Total Direct Student Costs	304,500	265,500	188,000	190,000	192,000
Personnel:	•		,	,	
Principal/Executive	42,000	45,000	45,000	45,000	45,000
Teachers	340,000	510,000	510,000	510,000	510,000
Clerical	50,000	75,000	75,000	75,000	75,000
Custodians	56,000	66,000	66,000	66,000	66,000
Benefits	122,000	174,000	174,000	174,000	174,000
Staff Development	3,000	10,000	10,000	10,000	10,000
Total Personnel	613,000	880,000	880,000	880,000	880,000
Occupancy:	,		,		,
Rent	216,000	324 000	340,000	340,000	340,000
Mortgage	•	,	ŕ	,	
Maintenance / Supplies	10,000	15,000	15,000	15,000	15,000
Utilities	18,006	27000	27 060	27,000	27,000
Janitorial Supplies					,
Total Occupancy	244,000	366000	382,000	382000	382,000
Office:	·	,	,		,
Supplies / Service 5	7,000	11,000	12,000	12,000	12,000
Equipment Rental/Maintenance	25,000	38,000	38,000	45,000	45,000
Telephone/Communications	5,000	8,000	10,000	10,000	10,000
Accounting & Payroll	3,000	5,000	5,000	5,000	5,000
Printing & Copying \ See.	,	,	·		
Postage & Shipping Supplies					
Total Office	40,000	62,000	65,000	72,000	72,000
Other:					
TOTAL EXPENSES	1,201,500	1,573,500	1515,000	1,524 000	1,526,000
EXCESS (or DEFICIENCY)	728,500	196,500	+255,000	+246,000	+244,000
BEGINNING FUND BALANCE	,			,	,
ENDING FUND BALANCE					



Budget Assumptions for Start-Up Budget and 5 Year Projected Budget

Revenues

1. Per Pupil Tuition Revenue:

Based on projected tuition @ \$9,000/student

2. Grants:

We anticipate at least one grant to assist us with technology development. The grant may cover expenses for hardware and software, as well as some start-up costs. We have devised a budget which will not rely on grants for the years following start-up and the first year of operation, but which we anticipate will help us enrich the overall program.

Direct Student Costs

3. Supplies:

Start-up: \$100/student for workstation supplies (chairs, desks etc.)

Ongoing: \$50/student for upkeep and replacement

4. Computers and Materials:

Start-up: \$1500/student for purchase and rental of workstation hardware, etc.

Ongoing: \$500/student for ongoing rental of some equipment

5. Field Study/Lab Project Funds:

\$300/student for petitioned project expenses

6. Insurance Expense:

Estimated figures given to us by ISA's insurance broker; will include all required liability, accident and damage insurance.

Personnel

7. Principal/Executive:

\$42,000/first year; \$45,000 second year and on

8. Teachers:

First year: 8 full-time teachers @ \$35,000

2 full-time counselors/special needs aides @ 30,000

Year 2-5: 12 full-time teachers @ \$35,000

3 full-time counselors/special needs aides @ 30,000

9. Clerical:

First year: 2 full-time administrative assistants/financial officers @ 25,000

Year 2-5: 3 full-time administrative assistants/financial officers @ 25,000

10. Custodial:

Our custodial plans are unclear given the uncertainty of facilities; we have included enough to cover 1 1/2 custodians and at least 1 kitchen staff.

11. Benefits:

Figure based @ 25% of salaries

12. Staff Development:

Estimated minimal development costs; specific programs to be covered by funding excess.



Occupancy

13. Rent:

Estimated according to rates given: \$18/sq. ft. @ 100 sq. ft./student. We account for general expansion of space in years 3-5.

14. Maintenance/Supplies:

Estimated figure including minor repairs, routine maintenance, building supplies (light bulbs, etc.). Some costs will be worked out with lessor.

15. Utilities:

Estimated @ \$150/student

Office

16. Supplies/Services:

Estimated figure includes postage/shipping, printing/copying costs, stationery, etc.

17. Equipment Rental/Maintenance:

Estimate based on the anticipation that we will rent a substantial amount of equipment, including a copy machine and office computers, at least for the initial phase of the charter.

18. Telephone/Communications:

Estimate includes cost for student electronic network services.

19. Accounting/Payroll:

We will employ the International School of America's accountant for these services. Figure is based on present rates for services.

NOTE: These budgets are still somewhat rough, based on the necessity of estimation. We have not accounted for personnel salary raises or general inflation, but plan to work over the next month on completing a more coherent and inclusive budget, which we will provide upon granting of the charter.



February 14, 1995

Jennifer Goldman 375 Salem St. Medford, MA 02155

fax: 396-4005

Dear Ms. Goldman:

I shuld like to offer this letter of support for Karl Jaeger's Charter school application to the Commonwealth of Massachusetts. I have known Karl for more than 25 years as a responsible and creative innovator in the field of education. His ideas about individual modular instruction are certainly worthy of full-scale trial in a Charter school. To have such a school in Cambridge would be especially useful to make possible important cooperative relationships with faculty and students at the Harvard Graduate School of Education.

Sincerely,

Donald W. Oliver

Professor of Education at the Harvard Graduate School of Education

mald W. Alive



10 Fawcett Street, 2nd Floor Cambridge, MA 02138 617 497-7000 (Offices) 617-497-6776 (Fax)

A General Store for the Curious Mind

February 8, 1995

Mr. Karl Jaeger Executive Director International School of America 19 Braddock Park Boston, MA 02116

Dear Mr. Jaeger:

I am writing to offer my strong support for your Cambridge Charter School program and to express my appreciation for your initiative in introducing technology into the school as a way to foster self-reliance and creativity among students.

I believe that the time has come for the public school to harness the vast developments in information and communications technology that our society has witnessed over the past decade and to capitalize upon technology's potential to enrich and diversify the structure and content of our children's education. At Learningsmith, we have seen that kids respond tremendously to educational tools that allow them to discover on their own, and I applaud your emphasis on an individualized, active learning program. We are excited to contribute actively to curriculum and technology development at the Cambridge Charter School and to serve as a local link to the world of educational technology.

Being a growing part of the Cambridge business and education community, Learningsmith is also eager to support the Cambridge Charter Lab's Project program and to offer our services as a resource for students interested in multimedia design and development. We see our goals as congruent with yours, namely to keep the learning process fresh, responsive, and inspiring for kids and adults alike, and we hope to work with you in whatever way we can to bring these ideas to fruition.

Please accept this letter as my endorsement of this exciting program, and as an expression of Learningsmith's commitment to your school.

Sincerely,

Xathlein M. Calcidise

Kathleen M. Calcidise

President & Chief Executive Officer



Hands-on math and science learning



2067 Massachusetts Avenue Clambridge, Massachusetts 02140 617-547-0430 - rax 617-349-3535

January 26, 1995

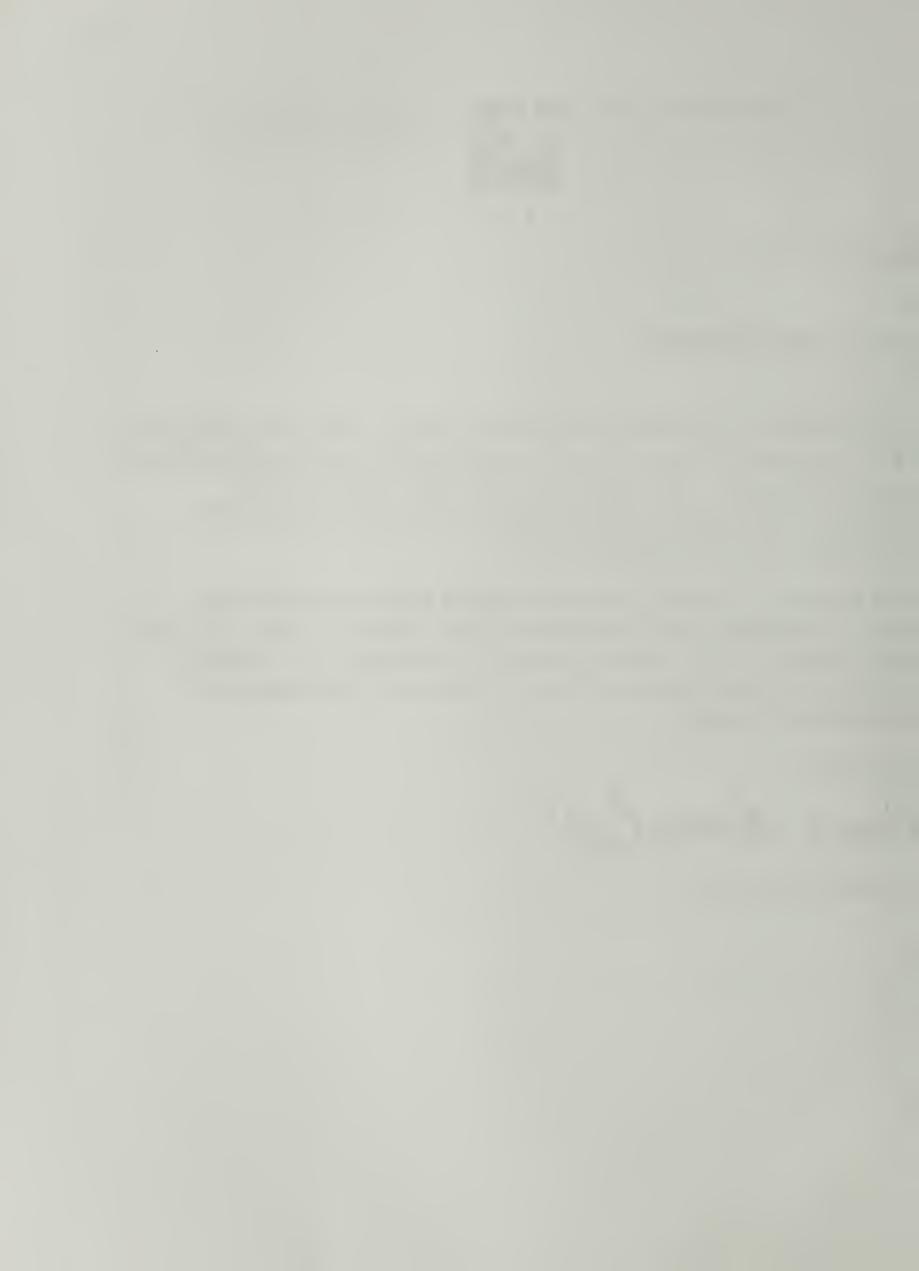
Dear Secretary Robertson,

As co-director of the Global Laboratory Project, I am very supportive of The Cambridge Charter School in association with the International School of America. I am impressed with their plans for the innovative teaching and will be happy to offer my expertise in technology and telecommunications.

I look forward to the day when the school joins our Global Lab Project. Global Lab is an internationally-acclaimed science and math project funded by the National Science Foundation. It is based on classroom implementations of state-of-the-art technologies and pedagogical strategies.

Yours truly,

Boris Repenfeld, Ph.D.



The Center for International Affairs



Harvard University 1737 Cambridge Street, Cambridge MA 02138 Telephone (617) 495-2965 Facsimile (617) 495-8292

Anne D. Emerson Executive Director

February 14, 1995

Karl Jaeger International School of America 19 Braddock Park Boston, MA 02115

Dear Karl,

I am writing to offer you and the International School of America my support for your initiative in applying for a Charter School in Cambridge. As you know, I have been a longtime supporter of the International School of America and the International Honors Program, and I applaud your efforts to apply the same innovation that makes ISA so unique to a community-based, public education program here in Cambridge.

I have been working in education for the past 25 years, and have encountered few programs as exciting and unique as the ISA's International Honors Program. The year I spent with the program in 1966-67 was the most important year of my education, and an experience I still consider to be one of the great highlights of my life.

From all you have told me about the Cambridge Charter School, I see many similarities between the two programs. One of the greatest things I took with me from my ISA experience was an understanding that learning only begins in the classroom, that the world outside the school is often a far more effective and exciting place for us to educate ourselves. I believe, as you do, that learning should never be an insular experience, but one that draws constantly from the community and the world at large.

I appreciate your efforts to bring a similar philosophy into the public school, through your Jay System. Having lived and worked in Cambridge for many years, I believe this community in particular would benefit greatly from your program.

Please accept this letter as my endorsement of the Cambridge Charter School.

pincerciy,

Anne D. Emerson

Executive Director, CFIA

Advisory Board, ISA



Peter and Jana Dublin 24 Chilton Street Cambridge, MA 02138 (617) 354-7734

February 13, 1995

Jennifer Goldman Cambridge Charter School

By FAX: (617) 396-4005

Dear Jennifer,

It is with great pleasure that we write this letter of support to you and your efforts to create a charter school in Cambridge.

As you know, we submitted our own proposal for a charter school in Cambridge just a year ago. We, along with four other groups in Cambridge, all submitted unsuccessful proposals in February, 1994. Four of those five groups banded together in 1994 to work collaboratively on the submission of another proposal, but we were not able to continue our collaboration and no new submission resulted from our efforts.

In spite of the failure of our own individual and collective efforts, we remain convinced that Cambridge is ripe for a charter school. There is no community in the Commonwealth that has greater diversity than Cambridge. There are few communities with greater community participation in the public schools. And there are fewer communities with as high a percentage of school-age children enrolled in private schools. All three of these factors will, in our opinion, make more likely the success of a charter school in Cambridge.

We realize, from our own experience, that putting together a successful charter school proposal is a huge enterprise. We are impressed with what you and Carl have done, both from a pedagogical and a logistical perspective. The mixture of individual skill focus with a collaborative emphasis on projects is a perfect combination for Cambridge, with its rich variety of community resources. As parents of two Cambridge Rindge and Latin graduates, we wish our children had what you are proposing as an option when they were in school in Cambridge.

We have talked about ways in which Intentional Educations—the software development company we own—may play a role in helping you to develop technology-based instruction. In addition, we want you to know that both of us as parents, as well as professional educators, look forward to working with you in any way we can to insure the success of your venture.

Sincerely,

Helw Dublin



The Computer Museum

300 Congress Street Barra MA 22216

(0:1) 460-6066

February 2, 1995

Dear Secretary Robertson,

As Director of Education at The Computer Museum in Boston and former Director of Technology for the Boston School System, I appreciate the need to incorporate technology into the curriculum of high schools and support the mission of the Cambridge Charter School. The vision of The Computer Museum is very similar to that of the Cambridge Charter School: to use technology to bridge the widening gap between young people of diverse cultural and socio-economic backgrounds and to use interactive programs and exhibits to both educate and inspire youth.

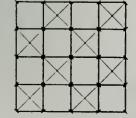
I met with Jennifer Goldman to discuss ways in which our two organizations could collaborate and we agreed that The Computer Clubhouse would be the perfect venue for students at the Cambridge Charter School to develop their own projects in the areas of electronic music, computer-controlled devices, virtual reality, multimedia, and computer game design and scientific simulation.

We also agreed that the students would benefit from several of our permanent exhibits which could be used as resources for individual and group projects throughout the school year. The Museum is currently developing several software packages that can be incorporated into the classroom as well as educating teachers on the innovative uses of computers in the classroom. This program could be very beneficial to the educators at the Cambridge Charter School.

I look forward to working with the staff of the Cambridge Charter School.

Sincerely,

Marilyn Gardner Director of Education







9 February 1995

Secretary Robertson Executive Office of Education One Ashburton Place Boston, MA 02108

Dear Secretary Robertson:

I am writing in support of Karl Jaeger and the International School of America's application for a charter school in Cambridge.

Karl has dedicated his life to innovative and educational programs for students. He successfully merged travel and education through the International Honors Program and I am confident that he will be able to achieve the same success with the Jay System in a Cambridge charter school.

The International School of America recently sponsored a two-day event with R.R. Donnelley & Sons, Fidelity Investments and my company, World Times, called "Liberating Learning: Technology as a Teaching Tool." This event focused on emerging technologies and the most innovative educational systems from around the world which use them. Karl generated a lot of enthusiasm for the charter school systems and his own Jay System. The enclosed conference folder will give you a better picture of the event.

If you have any questions about Karl and the International School of America's role in the above mentioned education conference, feel free to contact Rose Yap at World Times, who directed the event.

, Sincerely,

Crocker Snow, Jr.

President and Editor in Chief

Levelans Snow



THE FILM STUDY CENTER

Harvard University • 24 Quincy Street, Cambridge, Massachusetts 02138

February 3, 1995

Dear Jennifer Goldman:

As a long time admirer of Karl Yaeger and his many enterprises, I feel almost obliged to express my enthusiastic support for his latest initiative, the Charter School idea for an alternative high school in Cambridge.

What i have been able to learn about this scheme seems to me so promisingly radical and yet so clearly consonant with the best thinking and analysis of what our high schools should already be doing. Of course, the newest technology should be being exploited; the world and global issues should be addressed; students should discover the power of self motivation; and the multiplicity of cultural backgrounds should be interexperienced. School as it is at present has such fatal limitations. Only ideas such as Karl is promoting can possibly unglue the status quo.

I endorse both Mr. Yaeger and his brain child without reservation. Here is an experiment whose time has long since come.

Yours sincerely,

Robert Gardner

Director





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WG8H 115 Mestern Avenue Spaten MA 02134 Telephone 617 492 2777 Ser 617 787 0714 Telephone 330 6887

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Mr. Karl Jaeger Cambridge Charter School 375 Salem Street Medford, MA 02155

Feb. 6, 1994

Dear Mr. Jaeger:

The WGBH Educational Poundation was pleased to learn of your proposed charter school. You have presented an exciting and innovative approach to learning that recognizes students as individuals and requires their active participation in the learning process.

Existing and emerging media and educational technologies will undoubtedly play an important role in delivering information to students and in providing the student with tools for research and analysis.

As you are aware, WGBH has been involved in developing educational media for some time. Much of the work of the division of Special Telecommunications Services has focused on improving educational content and delivery systems.

We see the proposed Cambridge Charter School as an excellent opportunity to work together in exploring new information delivery systems and developing educational materials. We believe WGBH's experience in creating educational programming, interactive educational media, and information delivery systems coupled with your concepts of Units of Achievement and Lab Projects to be an opportunity to demonstrate news ways of learning and teaching.

Barry Jay Cronif Executive Director

Sincerely.

Media Access/Technology

CC: Brigid Sullivan
Pepita Soto

Post-It brand fax transmittal memo 7571 or pages > 2.

To KARL JABGER From R. SOTO

Co. CANO. CHARTER

Co. WSBH

Dept. Phone of 492 · 2777

Fax of Cit - 44 - 225 - 33 - 4964 Exx of 617 · 757 1639





February 13, 1995

The Secretary of Education ATT: Charter Schools Executive Office of Education One Ashburton Place Room 1401 Boston, MA 02108

Dear Secretary Robertson:

I am writing to support the application of Karl Jaeger, founder and diretcor of the International Honors Program, for a Charter School in Cambridge, Massachusetts. I do not do this lightly, since the selection of those who are given the resources necessary to establish a charter school has to be a difficult decision, and is always accompanied with risk, as all new enterprises are. However, my experience with Karl Jaeger, and with the program he created and has directed for more than 25 years, lead me to to believe that here the risk is well justified, and one has the chance to see brought into existence an imaginative school with a very good chance it will have the characteristics that permit replicability, in part if not in whole.

Jaeger's proposal emphasizes and brings together a number of themes, none of which of course are wholly new: the student as active participant in his or her own education, rather than passive recipient; the opportunity for each student to proceed at the student's individual pace, with opportunity to select the elements of curriculum the student will next concentrate on, which offers the hope of maximizing interest and commitment; the use of the growing library of imaginative means of addressing elements of curriculum that has been made available by the computer revolution; collaboration with real-world institutions, such as the educational TV station WGBH..

Few ideas in education as I have I have suggested are wholly new and proposals for charter schools could not and indeed should not be selected on the basis of originality alone: Beyond ideas and program, one must look at the credentials of the chief organizer, and see what track record in education that person has. I met Karl Jaeger about 25 years ago, when he was living in Cambridge and I first came to teach at the Harvard Graduate School of Education. His International Honors Program, which selects two or three dozen young college students to participate in a year of education on a given theme, pursued in a half-dozen countries, under the guidance of a trvelling faculty, was already in



existence. Interesting and creative individuals were consistently found by Jaeger, and persuaded to undertake the difficult task of planning a program, recruiting a faculty, lecturing to and accompanying the students in their stays in different countries. Jaeger had also created a network of associates in various countries who were available to lecture to the students, as well as a network of families to provide housing and hospitalty to the students.

Modest as the enterprise appears, it was a major undertaking, well carried out. In the course of the years such distingished figures as the anthropologist Gregory Bateson, the Harvard philosopher Stanley Cavell, the Harvard anthropologist and documentary film-maker Robert Gardner, and many others have led the group. I became a member of the advisory committee of the International Honors Program, and have continually been impressed at Jaeger's ability to find good people to take on what is an arduous task, and to find interesting and important themes that can be addressed and pursued by the mechanism of an around-theworld learning experience that he has created. I have met many of the students who have been in the International Honors Program and can attest that for many it has been a transforming and career-creating experience. The creation and maintenance of this program has been a major task of educational entrepreneurship.

Jaeger has always hoped to have a wider canvas on which to try out ideas in education he has nurtured and discussed with me, and others, over the years. He has made a lot of contacts with people and groups in this area who can help him. The Charter School program offers him an opportunity to create an innovative school, and one which has the characteristics that permit it to affect through its example schools everywhere. On the basis of his experience, his achievement, his steady commitment over many years to innovative education, I believe he should be be given the opportunity to create the school he proposes.

Sincerely yours,

Professor of Education and Sociology Emeritus



HMFH Architects, Inc. 130 Bishop Allen Drive Cambridge, MA 02189 (617) 492-2200 (617) 876-9775 FAX

February 13, 1995



Mr. Karl Jaeger, Executive Director International School of America 19 Braddock Park Boston, Massachusetts 02116

Dear Mr. Jaeger:

I am writing to offer my support and good wishes for your Cambridge Charter School proposal. I have been an active member of the Cambridge educational and civic community for many years, as a member of the Central Square Advisory Committee and a principal of HMFH Architects, Inc., educational facility planners in Central Square, and I believe the city's commitment to a public education system to meet the needs of all students could be well served by a program such as yours.

I have sent my own children to public and private schools in the city of Cambridge, and while I support Rindge and Latin wholeheartedly, I believe the program which you are proposing could earich students' educational opportunities in Cambridge, and benefit the community as a whole.

I have also been working in educational planning and architecture for many years, and would be happy to assist or advise you, as a parent and a professional, in the planning process of the school.

Please accept this letter as my support for your proposed Cambridge Charter School.

Sincerely,

George R. Metzger

GRM:cl

(I:\cll\jaeger1.doc)



HMFH Architects, Inc. 130 Bishop Allen Drive Cambridge, MA 02139 (617) 492-2200 (617) 876-9775 FAX

February 13, 1995



Mr. Karl Jaeger, Executive Director International School of America 19 Braddock Park Boston, Massachusetts 02116

Dear Mr. Jaeger:

As a principal in a Cambridge architectural firm specializing in the design and planning of educational facilities, I would like to offer you my support of your Cambridge Charter School program, and my appreciation of your initiative to introduce technology into the school as a way to foster self-reliance and creativity among students.

Having worked as an educational facilities designer and planner for over 30 years, I have witnessed a number of trends in both public and private education, most notably in the field of educational technology. There is clearly a need for a real initiative in this field, a school which is able and willing to bring technology into the center of the school, rather than at is periphery, and to harness its potential for assisting learning.

Being an established part of the Cambridge business and design community, HMFH is also eager to support the Cambridge Charter's Lab Project program. Cambridge is a community rich with cultural and intellectual assests, and HMFH would be excited to serve as a resouce for students interested in architecture and educational planning.

Please accept this letter of support as my committed endorsement of the Cambridge Charter School.

Sincerely,

John F. Miller

John F. Muler

JFM:cl

(I:\cli\jaeger.doc)





Mitchel Resnick
Head, Learning and Common Sense Section
Massachusetts Institute of Technology
20 Ames Street, Room E15-312
Cambridge, MA 02139-4307
phone: 617-253-9783
fax: 617-253-6215
mres@media.mit.edu

Febraury 10, 1995

Dear Secretary Robertson,

I am glad to write a letter in support of the Cambridge Charter School. My research group at the MIT Media Lab is involved in developing new computational tools that help students learn new things in new ways. We are particularly interested in developing new technologies that engage students in new types of design and invention activities. The Cambridge Charter School shares this interest in using computers as a creative medium for expression and exploration.

Our research group has worked very closely with The Computer Museum in Boston. In particular, we worked together to create the Computer Clubhouse, an learning center that provides access to technology for students from underserved communities. We think that the Computer Clubhouse would be an ideal lab site for students from the Cambridge Charter School, and we would be delighted to participate in a joint effort between The Computer Museum, the Media Lab and the Cambridge Charter School to make this happen.

Sincerely,

Mitchel Resnick

Learning and Common Sense Section

M. Februick

MIT Media Laboratory



A HYPOTHETICAL DAY IN THE LIFE OF A STUDENT

To facilitate a vision of the Jay System, the following is a description of a typical hypothetical day in the life of a student in the new system.

First, "Rick" arrives at the usual time and goes to his work station, which is located in a former classroom now accommodating 25 students' workstations comfortably. Term is already in full swing. In addition to students' workstations there are also workstations for two teachers, Mrs. Jones and Mr. Brown.

Attendance is taken as in the old system. Rick is working on a number of Units of Achievement, as he likes to focus his concentration on a number of different topics. He is also currently involved in four Lab Projects. Three of these are group projects, and one is an individual project which he has organized in consultation with his overall teacheradvisor, Mr. Green. As his individual project is a kinetic art project involving both artistic and manual skills, Mr. Green has arranged for this to be overseen by not one but two teachers - Mrs. Jackson from the fine arts department, Mr. Clark from the manual arts area. At a planning conference between Rick, Mrs. Jackson and Mr. Clark, it was agreed that Rick's construction should be located in the manual arts area as it would d require considerable use of tools and particularly a drill press.

Rick has never made a <u>Lumia</u>, the specific type of kinetic sculpture he is working on. He had seen one in the Museum of Modern Art and was quite fascinated to watch the 2'x3'x4' box producing moving images in changing colors on its white translucent screen on the box's front side. As the box was sealed, Rick was unable to see how the instrument which he viewed with others in a darkened area actually "worked". However, he was able to find an article explaining the process (involving electric light reflected from bent mirrored aluminum, moving parts and a moving disc of composite colored, translucent filters).

Rick has been working for some weeks on his project now and has accumulated the necessary ingredients - a box with a screen, several light sockets and clear filament light bulbs (he had started with opaque bulbs but quickly discovered that these did not produce the desired sharp, reflective images). As his work requires darkness at times, he has set up a small space isolated with hanging dark cloth. At this stage he is experimenting with the positioning of the light in relation to the reflecting images; he finds that he can distort the images to achieve different effects. Since his art project is an independent project, he can in effect spend time on it whenever it does not conflict with other time-specified activities such as his group Lab Projects.

One of these is a project of a socio-political nature that involves 33 students and is supervised by a social science teacher and an outside supervisor/consultant, a Mr. Lau who has recently moved to the school's area from Hong Kong. Mr. Lau had been in the tailoring business before deciding to leave Hong Kong in anticipation of its future reversion to communist Chinese control. The title of the project is "Hong Kong 1998". The project is an attempt to fathom Hong Kong's history, as well as its current status of uncertainty, and finally to consider some of the possible conditions following 1998. Hence the group has decided to subdivide into smaller groups and do research on specific aspects of Hong Kong's history. One group is looking at Hong Kong's creation as a colony, another is examining its history up to World War II, a third group is looking at the post WWII era



and its insurgence of refugees from mainland China, and a fourth group is looking at the colony's current turmoils vis-a-vis the anticipated takeover by communist China. There is not yet a group looking at the possible "post-1998 scenario," as the group felt that such activity would need to be grounded in the research leading up to 1998.

Rick is in the sub-group looking at the post-WWII era. Here special attention is being given to the many problems created by the influx of some two million refugees into a tiny space previously inhabited by less than 500,000 people. Rick's group, which meets together regularly, has managed to gain access to some old newspaper reports in both the Hong Kong press and the <u>London Times</u> which offered them some interesting insights into how journalistic reporting of the same event can vary in different parts of the world. One of Rick's specific sub-tasks is to learn about the Indian minority population in the colony and its role in the socio-economic structure. Here Rick has been successful in soliciting the help of a member of the local Indian population who has relatives in Hong Kong.

This project has been going on for several months and Rick has found it increasingly fascinating as the carious sub-groups exchanged periodic reports on their findings. Indeed, Rick's choice of personal future focus in university studies is evolving toward the social sciences as a result of this project.

Rick's second group project is one that has started only recently and was proposed by a student in the school. It is the most intriguing scientific/intellectual project that Rick has ever been involved in. In a sense it is the posing of an "answer" and the project's quest is to find the right "question". Albert Einstein had raised a question seeking the relationship between matter and energy, and his answer was C^2 , as expressed in his famous formula $E=MC^2$. The project of the group that Rick has joined is to discover the possible significance in the make-up of our universe of C^2 .

The reasoning behind the project as proposed by Rick and his fellow students is, in effect, along the following lines: "Surely if the precise relationship between two of the universe's most fundamental components, was precisely the speed of light <u>squared</u>, is it not reasonable to expect that the speed of light <u>cubed</u> might also play a significant role in the scheme of things?"

This group had attracted a most intriguing combination of students. Indeed, the teacher/advisor had felt compelled to seek additional expert "advice" from beyond the school's walls, and had been successful in soliciting offers of help when needed from an array of university professors in a range of subjects, including not just physics but also astronomy, chemistry and biology. Again, the group of students had agreed to sub-divide into smaller groups to focus on the possible areas of knowledge where the answers/questions might lie.

Rick's own group may have taken the most interesting approach to the search. Instead of focusing on one of the formal disciplines of knowledge that might be related to the question/answer, Rick's group is pursuing the quest by looking at Einstein himself! They are studying how Einstein as an individual had come up with C² as an "answer". By studying his biographical history and examining the social context at the time in which he worked, they are attempting to uncover the psychological nature of the man who



discovered the significance of C^2 . Historically, they are looking at the status of scientific knowledge at Einstein's moment of discovery and then discussing how modern discoveries might have influenced Einstein's conclusion. The group is proposing to invite all the members of the project group, as well as their university "consultants," to join in a brainstorming session to discuss the possible expansion of Einstein's ideas, where any and all participants would be invited to throw out, freely and without fear of belittlement, possible roles for C^3 in the universe's structure.

Rick's fourth Lab Project is one that was suggested by a local architect and urban planner, Karl Hunter, who had heard of the school's invitation to local professionals to spend a few hours a week running a Lab Project at the school, on a topic of particular interest to them. The project is an attempt to design a town that has neither streets nor automobiles, and yet which thrives economically and socially. This project proved upon submission to be extremely popular, as a result of which students were asked to write a brief statement as to why they should be included in the group. Rick's own reason for inclusion was a very personal one, namely that a member of his family had been severely and permanently injured in an urban car accident.

This group, involving 30 students, has been going on for some time and has come up with a rather ingenious "plan" that consists of starting with a rolling expanse of central Californian land which at present is roadless. Into this moderate climatic area they are proposing the creation of a series of physically dense villages, somewhat modeled after roadless medieval Italian hill towns. The medieval villages also tended to be packed rather tightly into an area that offered physical defense against potential invading armies. Of course, the students do not expect their hypothetical villages to be invaded, but they use the model because they like the idea of a community living close enough together so that cars would not be needed to get around within the village. In planning the expansion of such a community, the students then came up with the idea of constructing an elevated electric rail system to connect a series of these "village" communities. Their initial plan called for an optimum of seven inter-connected villages, with two of them being "portal villages" with connections to the outside world, where cars could be left and/or where access to the regional rail system would be possible.

The group has gone into considerable exploration and even the construction of physical models of a village, as well as a model of two linked villages within a hypothetical landscape. The sub-group responsible for the construction of the whole village has even gone so far as to identify a specific possible site between Santa Barbara and Big Sur on the Pacific Ocean, just west of the town of San Luis Obispo. They had chosen this "site" on their state highway map of California, noticing that this was one place where Route 1 did not go along the Pacific coast, thus offering the town the possibility of siting one or two of its villages close to the ocean. One further advantage of their plan is that they have designated 80% of their 8,000 acre town site to open land, so that a resident of any village could easily gain access to the open fields surrounding each village for agriculture and other purposes.

The sub-group responsible for specific architectural and structural details of the villages have identified several "principles". One is that, as not all of the villages would be constructed initially but only as the town grew, that a new village should only be constructed when there is sufficient demand from would-be inhabitants, as well as



occupational possibilities for them. Once such criteria were fulfilled, then a whole new village could be constructed at one time.

Additionally this sub-group, of which Rick is a member, is discussing the possibility of giving different individual villages different architectural sub-themes, while maintaining coherent architectural design within each village. The group is excited about the possibility of an Art Nouveau village, as well as an Art Deco one; even a Japanese village. The design element is forcing the group to consider complex issues in architecture like aesthetics vs. function, and environmental integration.

The sub-group responsible for economic aspects of this project has even gone so far as to contact the San Luis Obispo high school and stir up sufficient interest in the project that the two schools have begun a collaboration by computer network and mail, with the local students supplying Rick's group with photographs of the site and information about local industries and employment possibilities. The group is arranging for professional planners and architects to review and critique their project at a more developed stage. The California students have even gone so far as to contact local boards to seek information on planning requirements for a construction of this sort!

From the above description of Rick's Lab Projects, it becomes apparent that his school day is not the typical 45 minutes of English, 45 minutes of algebra, 45 minutes of history, punctuated by bells and chaos. Rick is free to decide on the best use of his non-Lab Project time. One day, in fact, he became so intrigued with a particular aspect of his math studies that he spent all his available time on geometry Units of Achievement!

Rick does not feel that his work at school is isolated from the world at large. His "teachers" include a practicing architect, a recent immigrant from Hong Kong, and a number of university professors, as well as all his fellow students. And he, on the East Coast, is corresponding with students in California on a project involving a growing mutual interest. Perhaps some day San Luis Obispo High School will wish to adopt the Jay System in their school too!

